DEC 21 1925

PAPER TRADE JOURNAL

PAPER THE MAGAZINE
Is Combined with Paper Trade Journal

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BLEACHED and UNBLEACHED
SULPHITES
KRAFT PULPS
GROUND WOOD
NORRONA
PULP STONES

PERKINS-GOODWIN CO.
33 WEST 42nd STREET
NEW YORK

PAPER
PRINTING PAPER
of
EVERY DESCRIPTION

Entered as second class matter August 12, 1925, at the Post Office at East Stroudsburg, Pa., under Act of Congress of March 3, 1879 — ESTABLISHED 1872 FIFTY-THIRD YEAR — Published every Thursday by the Lockwood Trade Journal Company, at 24 North Crystal St., East Stroudsburg, Pa.
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Some Interesting Facts Concerning the Noble & Wood Pulping Engine

The following are a few of the results which have been determined by actual test:

Domestic Kraft pulp laps, 45% dry, fed into 1200 lb. pulper through chute from overhead, treated for beaters and dumped within ten minutes. On thoroughly dry foreign Kraft, total time elapsed was 21 minutes.

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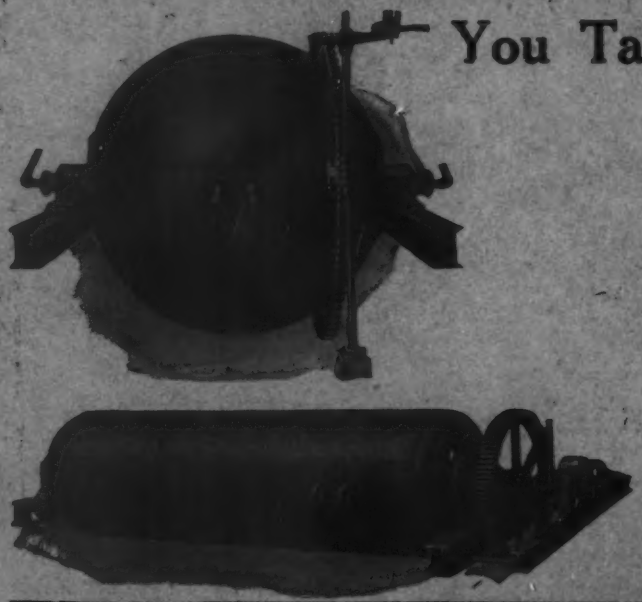
Many other equally good records are available upon request.

Our booklet "CUTTING PRODUCTION COSTS WITH THE PAPER PULPING ENGINE" carries a full history of the development of the pulper. Write for a copy.

THE NOBLE & WOOD MACHINE CO., Hoosick Falls, N. Y.



You Take No Chances Here

YOU are not doing any experimenting with rotary bleaching boilers this year; they are too important a piece of equipment.

Biggs has won a reputation for building Globe and Cylinder Rotaries over a period of thirty-five years; you will find them in the leading paper mills in this and other countries.

The superintendents of these mills will tell you what they think of Biggs equipment. If you are interested we'll tell you where they are

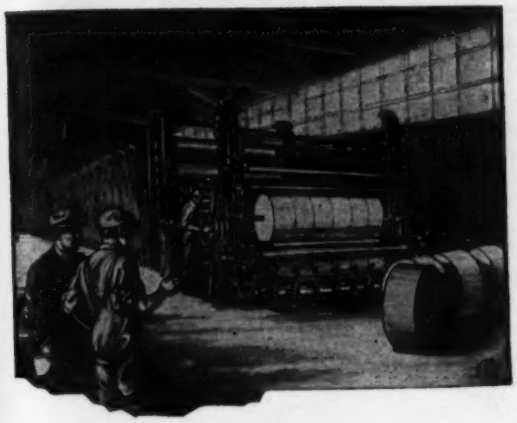
Globe and Cylinder Rotary Bleaching Boilers
Digesters
Riveted Steel Tanks
Flumes, Smokestacks, Penstocks, General Steel Plate Construction of every description.

THE BIGGS BOILER WORKS COMPANY
Akron 20, Ohio

The Biggs Boiler Works Co. Akron Ohio Est. 1867

GLOBE and CYLINDER
ROTARY BLEACHING BOILERS
for Years of Dependable Cooking and Bleaching

PRESSURE SLITTING **CAMACHINE** PRESSURE WINDING
ROLL PRODUCTION MACHINES



IN THE MILL

That is where Camachine Mill Type Roll Winders are proving themselves. They are gradually getting to be known among practical mill men as the ultimate in slitting and roll-winding equipment.

They are properly designed. They are built with care and precision in a modern machine shop.

They save labor, eliminate broke loss, and thus save money. Best of all, from the viewpoint of the man whose job it is to get out the paper, *they produce*

Q Have you received your copy of the new catalog of CAMACHINE Mill Type Roll-Winders? If you have not, or if you know someone who ought to have one, please write to us.

Cameron Machine Company
61 Poplar St., Brooklyn, N.Y.
[Builders of CAMACHINES]

PAPER TRADE JOURNAL
ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD
FIFTY-FOURTH YEAR

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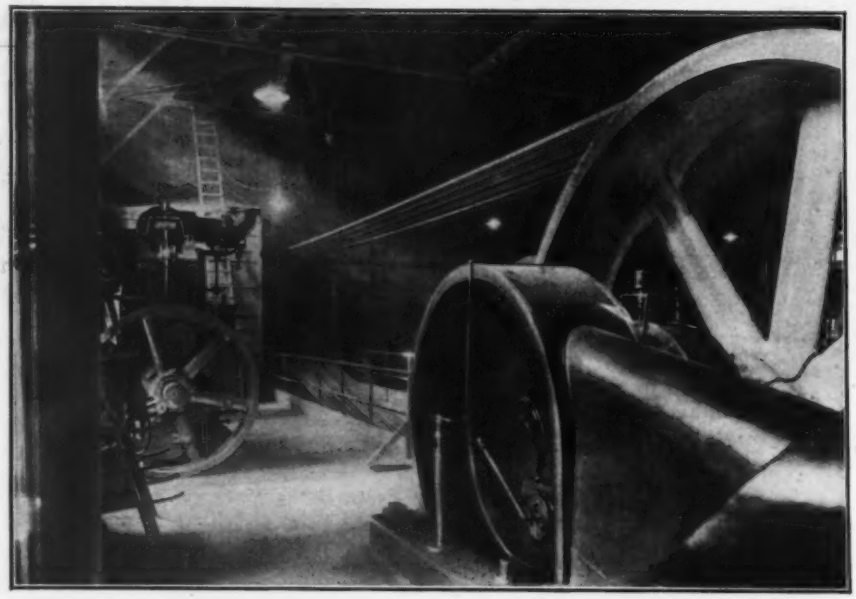
Steadiness



One would naturally think that on account of the non-slipping quality of a rope drive that any unsteadiness in the driving member would be transmitted to the driven. This is not the case, however, for the properly installed rope drive is exceptionally steady. This is on account of the rope's light weight, elasticity, and the slackness between the pulleys which automatically takes up variations in the load.

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is a product which the Columbian Rope Company, after many years of constant improvement, has perfected. This rope will give maximum service, and it bears the manufacturer's guarantee. Specify Columbian when you are next in the market for Transmission Rope.

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COLUMBIAN ROPE CO. AUBURN N.Y.
TRADE MARK

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

PAPER

The Magazine of the Paper Industry

Vol. LXXXI, No. 25 Thursday, December 17, 1925

Public Printers Ask for Bids on Paper for 1926

42,300,000 Pounds of Various Kinds of Paper Wanted For the Fiscal Year Beginning March 1, 1926—Bids Will Be Opened January 25 and Awards Will Be Made One Week Later Specifications Committee Submits Its Report—Approximate Quantities of Paper Set Forth in Schedule

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 16, 1925.—Bids for 42,300,000 pounds of various kinds of paper for the use of the Government Printing Office for the fiscal year beginning March 1, 1926, will be received on January 25 and awards made one week later, according to announcement made by the Joint Congressional Committee on Printing following a meeting last week at which it received and accepted the report of the paper specifications committee. Several important changes have been made by the specifications committee, and its report was signed by F. P. Veitch, chairman; B. W. Scribner, F. F. Weston, E. E. Emerson, W. H. Kervin, E. O. Reed, Ansel Wold, and W. W. Scott.

The Committee's Report

The report of the specifications committee to the Joint Committee follows:

The Committee on Paper Specifications respectfully submits the following report and schedule for paper for the public printing and binding for the year beginning March 1, 1926.

The most important change in the schedule for paper as submitted herewith is the unit of count and basis of weight on which the paper will be ordered. Although the specifications throughout the subjoined schedule are based on the 500-sheet ream, the Government Printing Office will adopt the 1,000-sheet count unit and the 1,000-sheet weight basis for all paper, beginning with this contract. Substance numbers on the 1,000-sheet unit basis are double the specified ream weight. The respective size bases have not been changed for the various kinds of paper, such as 25 by 38 inches for printing papers, 17 by 22 inches for bond, ledger, writing, and map papers, 24 by 36 inches for wrapping papers, 19 by 24 inches for blotting papers, etc.

Quantity, Quality and Packing

The instructions under "Quantity and Quality," and "Packing," have been rearranged with a view of bringing related matters together under the general headings "Quantity," "General Requirements," "Definitions of Terms Used in the Specifications," "Quality and Inspection," "Methods of Inspection and Tests," and "Packing." The standard methods used at the Government Printing Office in sampling and testing deliveries of paper are set out in some detail for the information of the bidders and contractors.

Special attention is directed to paragraph No. 12, which as revised in effect makes the quantities under each specification definite quantity items, it being optional with the Public Printer or the contractor to cancel the contract in writing when the total estimated quantities under any specification have been ordered. In the absence of such written notice the contract, with the approval of the Joint Committee on Printing, will remain in full force and effect as to additional quantities which may be needed to meet the requirements of the Government Printing Office.

Thickness requirements on Machine-finish Book, Light Weight Machine-finish Book, 50 per cent Rag Light Weight Machine-finish Book, 50 per cent Rag Machine-finish Book, Supercalendered Book, 50 per cent Rag Supercalendered Book, and Half-Tone Book have been made more definite, the specifications heretofore permitting wide variations in the thickness of these papers.

Folding endurance requirements have been introduced into the specifications for 50 per cent Rag Double-coated Book, Blue U S M O Safety Writing, U S M O Writing, White and Blue, and No. 1 and No. 2 Kraft.

The specifications for mimeograph papers have been materially modified. A specification for Ground Wood Mimeograph, to meet Government requirements for a low-priced mimeograph paper, has been introduced, and the specifications for Chemical Wood Mimeograph, White and Colored, and 50 per cent Rag Mimeograph have been modified to make them more nearly meet the requirements of the Government service.

Owing to the difficulty of determining by the examination of paper, the process by which the chemical wood pulp in it was made the specifications which heretofore stated sulphite pulp have been changed to read "coniferous chemical wood pulp."

The title of "Onion Skin" under "Manifold Paper," has been changed to "50 per cent Rag White Glazed Manifold," this title being more in harmony with trade practice.

Folding endurance and bursting strength on "100 per cent Rag White Bond, Tub-sized, Air-Dried," and "Declaration Bond, Tub-sized, Air-dried," have been raised in order to secure paper of the highest quality.

Specifications for Ground-wood Mimeograph paper; Machine-finish Lithograph Printing paper; 50 per cent Rag super-calendered lithograph printing paper; 100 per cent Rag Chart paper and No. 1 Kraft paper have been added.

Throughout the schedule additional sizes and weights have been added wherever the requirements of the Government Printing Office have made it necessary.

The committee desires to emphasize the importance of opacity in printing papers—this matter will receive careful consideration during the ensuing contract year with a view of incorporating definite requirement for this property in future specifications.

This schedule embraces 191 lots as against 178 lots for 1925-26, and the quantity estimated for the full year is approximately 42,300,000 pounds.

Estimated Quantities

The approximate estimated quantities set forth in the schedule comprise the following:

(*Continued on page 62*)

Paper Demand in Philadelphia Much Quieter

Majority of Orders Transacted Were for Immediate Holiday Needs in Small Lots—Most Consumers Said To Be Holding Off While Records of Stock in Hand Are Being Completed—News Print and Cheaper Grades of Coated Book Papers Still Active

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., December 14, 1925.—As the inventory season approaches there is a tendency on the part of the consumer to hold off orders for many of the standard supplies of papers in both the fine and coarse paper divisions. The fine paper dealers, particularly, have quieted down to a hand to mouth demand, except as noted in the first two weeks of the month, where next year's contracts have been listed for the supply of news print and a few of the cheaper grades of book papers. Consumers are advising sales representatives to postpone their efforts until after inventories have been accomplished. Most orders of the week were for immediate needs and in small lots, except for a few of the holiday specialties.

A Specialized Fine Paper Market

The fine paper market has drifted into a hand to mouth and specialized affair. There are a few of the Christmas demands in greeting and announcement stocks, card boards, die wiping papers and others used by the engraving and social stationery trade, that just now are holding to the more active holiday needs. Ledgers, bonds and some of the cheaper coated papers are active, the writings being required for the closing of the 1925 business cycle, or for the re-opening of accounts in the new year.

Coarse Papers Confined to Holiday Needs

As the holidays draw near, the hand to mouth needs for Christmas packings, such as wrappings, containers, clothing boxes, tissues and waxed specialties, broaden, and so the coarse paper section is sharing in the rushing December demand for all grades of merchandise for the gift-giving season. There is not much preparation in evidence on the part of the dealers in looking ahead for next year's supplies. Dealers prefer to await the opening of industrial activities before they place their new year's requirements, and so have confined their attention to the moment's business.

Stock Demands Quiet

There is very little demand for paper stocks in the raw materials and dealers are marking time until after the new year, when the mills become more active.

Blotting Paper Situation Discussed By Dealers

In an effort to untangle the complicated situation existing between the various dealers in blotting papers, the local fine paper distributors made this phase of trade activities the topic at their bi-monthly meeting in the Philadelphia Bourse at the luncheon session of the Fine Paper Division of the Philadelphia Paper Trade Association. In order to straighten out a chaotic condition in the price of blottings it was suggested that some remedy be applied and suggestions from dealers be forwarded at the next gathering of the Fine Paper Division in January. The factors that have brought about the discussion deal with the methods of price quotation on direct mill shipments as contrasted with those by dealers who carry blottings in stock and ship from warehouses. Those firms who do not stock blottings have been quoting direct mill shipments of small lots at values that have been embarrassing to those carrying year round supplies on hand and in many cases so low that competition entails a loss to those who have overhead expenses coincident to stocking.

Another price situation which has been remedied as a result of the Association's remonstrance was made a matter of comment at the Thursday assembly of the fine paper group. In a previous November meeting there was brought to the attention of the members by the allied associates in the printing industry and included in the membership of the Typothetae, the matter of paper dealers deviations from the quotations that have been standardized in the Price List and creating a miscellaneous and confused valuation for regular and standard stocks of printing papers, which was frowned upon by the master printers. This was threshed out among the fine paper group and members were urged to adhere to the ethics of the association regarding the Price List. One of the prominent members of the group related his experience with a master printer who spent 1½ hours trying to persuade the paper merchant to beat the price of another distributor unsuccessfully and who later received a letter from the printer complimenting him upon his adherence to the high standard of ethics shown in the refusal to deviate from the price quoted in the List and given by the competing merchant.

Paper Men To Participate in Craftsmen's Convention

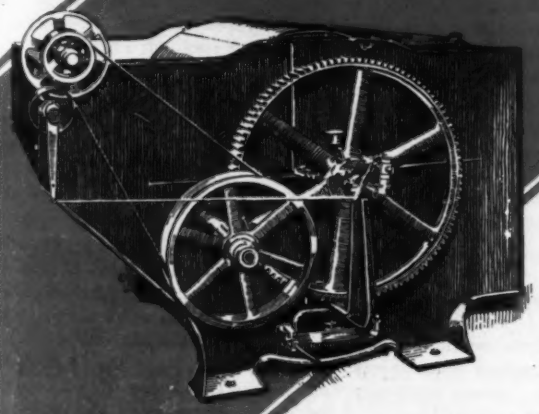
Following an appeal from the Philadelphia Club of Printing House Craftsmen, the paper dealers included in the group of the Fine Division of the Philadelphia Paper Trade Association will join with their allies in the printing trades and render financial support for the coming National Convention to be held in July of 1926. At the meeting of the Fine Paper Division, during the week, the request of the Craftsmen's Club was placed before the members. It contained an appeal for the participation of the paper dealers in promoting the Convention of the National Association of Printing House Craftsmen by practical support in both exhibits and in the financing of its activities. The paper men approved the request, stating that they would be pleased to render any assistance which would involve a reasonable amount. A committee was appointed to canvass the trade for its contributions and then to report at the January meeting the total sum which the paper dealers would consider as their fair equity for the national gathering here in co-operation with the Quaker City Craftsmen's Club.

It was proposed at the meeting that the Paper Trade Association hold its 1926 schedule of meetings at the new home of the Poor Richard Club, in Locust street, and this matter too will come up for action at the next gathering. The Chairman of the week's meeting was James McNutt of the Raymond and McNutt Company.

John H. Sinex Celebrates 75th Birth Anniversary

Though 75 years have rolled round since the natal day of President John H. Sinex, of the Garrett-Buchanan Company, there was very little evidence of the inroads of time upon his good health, happy outlook on life, and his ability to join in with those who have long been associated with him in celebrating the attainment of the 75th mile-stone last Saturday at headquarters, 12-20 S. 6th street. When the Nestor of the paper distribution trade reached his office at noon on December 5, he found assembled beneath a bower of palms and greens 190 officials and employees of the firm who greeted him with a hearty and cordial spirit of congratulations and then sprang a surprise by leading him to a festive board prepared in his behalf. Round the luncheon table at which was seated President Sinex and E. J. Cattell, life long friend and head of the Convention Bureau of the Chamber of Commerce, the employees gathered. During the luncheon Mr. Cattell told of happy childhood days spent in association with President Sinex and then leading the listeners down through the years gave a brief summary of the struggles and final business triumphs of his friend, winding

High priced pulp and Low priced paper



The BIRD SAVE-ALL

Alert, up-to-date paper makers are facing the temporarily narrowed margin between cost and profit by effecting the strictest production economies. Waste can no longer be tolerated.

This accounts for the large number of Bird Save-Alls now being installed. The tons of high priced stock they save are too valuable to be ignored.

May we show you how much a Bird Save-All installation will save in your mill?

BIRD MACHINE COMPANY
South Walpole Massachusetts

BIRD MACHINERY

Western Representative
T. H. Savery, Jr., 224 So. Michigan Ave.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Limited
260 St. James Street
Montreal, Canada

8601

up with words of wisdom and advice to the younger generation of the Garrett-Buchanan business family. He was followed by President Sinex, who responded in brief but deeply earnest words of appreciation for the honors of the day and for tribute paid by his co-workers. To the accompaniment of a six piece orchestra there was a choral program of modern and old time songs interspersed with vocal selections by C. D. Lamkin, Southern representative of the firm, whose excellent baritone voice brought applause from his fellow workers. The program was brought to a close with a fitting ending in two original toasts, composed by the employees, printed in scroll form, and read and presented to President Sinex by the employees as a token of their good will and containing their wishes for continued prosperity and a long life of happy association. There were present to join with the workers in celebrating the event Vice President and General Manager Morgan H. Thomas, Secretary G. Lloyd Cowan and William E. Coe, of the firm.

Reigel and Co. to Join in Holiday Banquet

As host to its forces, the firm of Reigel & Co., Inc., 140 N. 6th street, will on December 19 celebrate its annual Fellowship night in banqueting and dispensation of Christmas cheer to more than 30 workers enrolled on the cleverly gotten up invitation and program. This unique invitation, all worked by hand designing, contains a photographic reproduction of Treasurer Arthur B. Sherrill, of the company, surrounded by the official family and flanked by rows of those enrolled among the working forces and executives. It is in green background with a red chimney into which will be slipped a "green back" gift and holiday memento from the heads of the firm to "Our Little Business Family" so appropriately inscribed in the head lines of the program. A committee has been appointed by the firm to arrange for the banquet and general celebration of the wind up of the year's business at the Rittenhouse Hotel, with R. L. McCall, James McCracken and Fred Van Gilder in its ranks.

Paper House of Pennsylvania Plant on Overtime

With a rushing business and a piling list of orders urging immediate attention the Paper House of Pennsylvania has been obliged to extend the working schedule at its converting plant at Front and Federal streets. So heavy has been the orders for specially cut rolls and sheets that the plant has been obliged to operate three nights a week in addition to its daily normal working hours. This demand for special sheeting and cutting of rolls is of national scope and emanates from the paper trade as well as the printing industry. The plant has been thoroughly equipped and is capable of quantity production, having for its purpose an elaborate mechanical equipment providing one of the best converting services in the East. It is the intention of the officers of the Paper House to extend its lines of paper distribution after the first of the new year, when there will be added several new mill grades of fine papers.

New Leather Substitute For Frankot Line

Following its rapid development of numerous paper substitutes for leather, the Franklin Paper Company, 810 Sansom street, announced another grade of heavy weight paper, which will be used instead of flexible leather, and with all the appearance of the real skin. This newest of leather papers is especially adapted for substitutes of flexible leather covers for books, stationery supplies or other purpose where this grade of skin is used. It is specially serviceable for covers because it eliminates the necessity for turning down the edges and the pasting of an inner lining to the cover and is an economizer in overhead charges connected with the old time leather or leatherette substitutes. The new heavy 18 point leather paper answers every purpose of flexible leather minus the cost of overhead of the workers, pasting and other work coincident to the bound product. It can be used for high grade catalogues or any other like purpose in covers such as edition work. It is marketed under the Frankot Brand, comes in all the embossed leather finishes and grains, is extra heavy, has great durability, is flexible, is water-proof, costs less than one third of other leather substitutes and can be had in beautiful colors and embossings, of blue, black, mahogany, green and brown. It has already been tried out by large publishers of stationery, edition books, and novelty manufacturers, with much success.

Considine and Co. Develops Latin American Exports

Though Considine & Co., exporting and importing house and subsidiary of the Paper House of Pennsylvania, has been established as an independent concern but a single year, it already has an extensive Latin American business now being handled through its recently acquired offices in the new Public Ledger Building, 6th and Chestnut streets. Due to ability to speed shipments of news print, sulphite bonds and book papers through a specially arranged shipping service, and the large stock of these now stored in warehouses, the firm has been able to secure a lucrative patronage among the commercial houses, printers, publishers and paper distributors of the West Indies, Central America and other South American parts. The firm is using the Port of Philadelphia facilities, wherever they permit of speedier transportation of its orders.

To Head Wood Utilization Committee

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 14, 1925.—Axel H. Oxholm, chief of the Lumber Division of the Bureau of Foreign and Domestic Commerce, has been selected by Secretary of Commerce Hoover as Director of the National Committee on Wood Utilization. Mr. Oxholm will begin his new duties at once, but for a time will also continue to supervise the work of the Division.

Mr. Oxholm became associated with the Department of Commerce in 1916 as a lumber trade commissioner, and was sent to northern Europe to study the forestry resources, lumber manufacture and utilization. While in Europe he was associated with the purchasing board which was then buying Scandinavian lumber for the War Department.

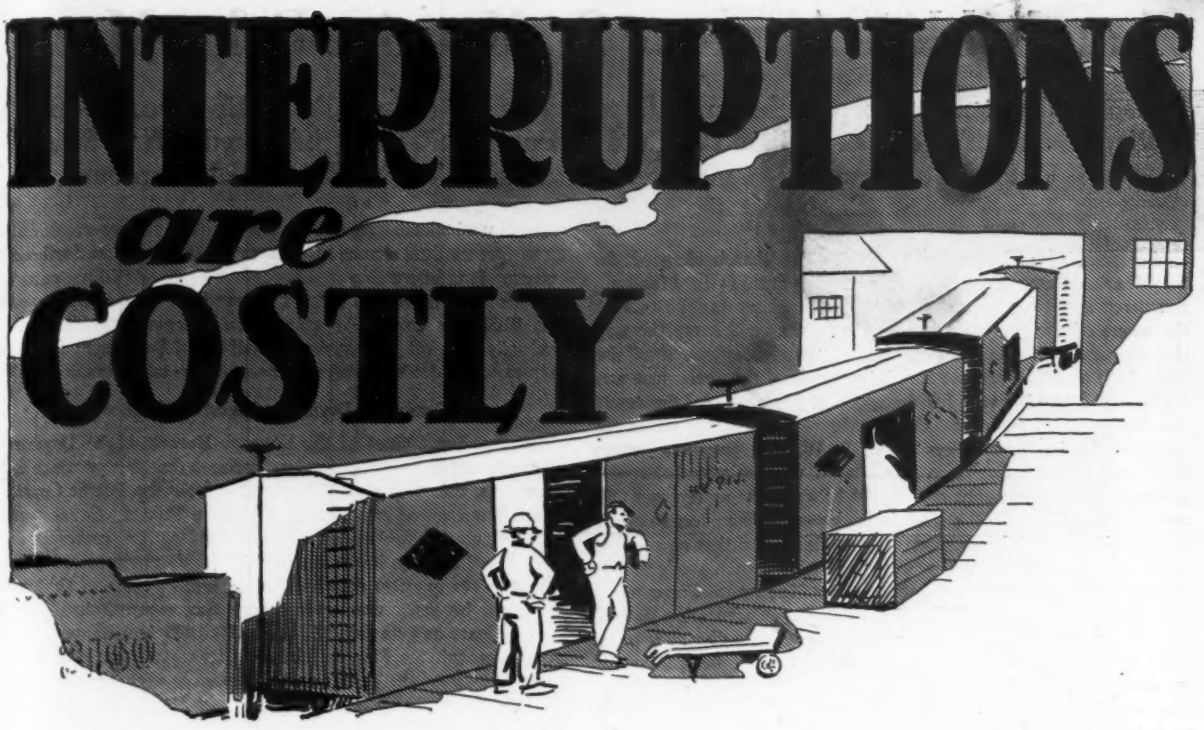
When the Lumber Division was established in the Department of Commerce in 1921, Mr. Oxholm was made head of that work, and through his efforts the lumber industry of the United States was brought into closer contact with wood users abroad, both as to the development of foreign markets, the adaptation of foreign practices of wood-using which were possible to use in this country for greater economies, and for the broadening of information in the lumber industry of the United States as to the requirements of foreign markets.

In 1923 and 1924 Mr. Oxholm spent several months in western Europe for the Department studying improvements in the wood using practices of the countries there. He found that most of the European countries faced problems of conservation and utilization which are now arising in America; and they have adopted practices which have not heretofore been considered in the United States because of the supply of cheap lumber, which has existed up to within a few years. The rapidly increasing lumber values have led the lumber interests of the United States to closer cooperation with government agencies here for improvement of wood using practices.

Suggestions which have been received by the National Committee on Wood Utilization indicate an increasing recognition that the conservation of timber resources through more efficient use of wood is of immediate benefit and is as important to the general public as ultimate reforestration. The purpose of the committee's work is to promote greater effectiveness in preventing wastes arising from present methods, so that the public at large as well as American industry may benefit.

Norman W. Wilson, president and Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, are among the members of the committee.

INTERRUPTIONS are COSTLY



OF the many factors contributing to the two billion dollar waste in industry's payroll, *time out for repairs* takes a prominent position. Interruptions are costly when you realize that 20% of the wages you pay out are for idle time. This doesn't take into consideration the expense of machine hours lost—only the human element.

You can fortify yourself against this loss by the best insurance known—Beloit insurance—the taking into your partnership of the NEW BELOIT FOURDRINIER. It will do more than any other single factor in stopping waste, eliminating lost time and in speeding up production on a smooth-running steady basis.

Some startling evidence is at our disposal to prove these contentions. Let us submit you the facts.

The NEW BELOIT FOURDRINIER

Beloit Iron Works **Beloit, Wis., U. S. A.**

Since 1858 Builders of Paper, Board Mill and Container Plant Machinery

Shareholders Approve St. Maurice-Belgo Merger

Newsprint Investment Corp. Debentures Reported To Have Been Taken Up Already—Bill To Place Export Tax of Ten Dollars Per Cord on Pulpwood To Be Introduced at Next Session of Federal Government—Announcement of Large Timber Limits Sale Expected

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., December 14, 1925.—The shareholders of the St. Maurice Paper Company, at a special meeting in Montreal, concurred in the agreement made by the directors for the sale of the assets of the company to a syndicate that will carry through the merger of St. Maurice and Belgo, and also approved of the sale of the assets. The vote for the approval of the agreement was 84,150 to 810, and the vote for the approval of the sale of the assets was 84,095 to 860 opposing. One of the features of the statement presented to the shareholders by M. B. Wallace, president of the St. Maurice Paper Company, was that it was estimated that the earnings of the two companies would be sufficient to represent $8 per share on the 150,000 shares at no-par-value common stock of St. Maurice Valley Corporation. It was also stated that an earning power of $6 per share was indicated on the common stock of the Newsprint Investment Corporation. The Newsprint Corporation will hold 76,000 shares of St. Maurice Valley Corporation out of the total of 150,000 shares. As a first charge on the dividends to be paid by St. Maurice Valley common stock, will be an annual payment of $175,000, representing interest on the $2,500,000 of Newsprint Corporation debentures, bearing 7 per cent. There probably will also be overhead expenses that may amount to about one per cent on the capital stock of the Newsprint Corporation or some $60,000 per annum. If the St. Maurice stock paid $4 a share, this would represent a payment of $304,000 on the 76,000 shares, leaving about $70,000 applicable to the 61,000 shares, or if the St. Maurice Valley stock paid $5 a share, there would be an addition of $76,000 or a total of about $45,000, or in the neighborhood of $2.50 a share. An increase in St. Maurice Valley dividend to $6 a share would make a little over $3.50 a share available on Newsprint Corporation stock. The balance sheet of the St. Maurice and Belgo companies gives an indication of the forthcoming issues. In addition to the bonds and preferred stock as announced of the merger corporation, it would appear that $1,000,000 more of Belgo preferred would be offered, and a similar amount of Belgo bonds. It is understood the $2,500,000 of Newsprint Investment Corporation debentures has been placed already.

Timber Limits Sale

The provincial government is expected shortly to announce the sale of a large area of timber limits located along the Mistassini River in the Lake St. John district. Some water falls will also be disposed of at the same time, so as to permit the exploitation to be carried out more advantageously. Mills will be built shortly after by some of the interests, which are said to have asked the Government to make the necessary move to auction the rights on those limits. There are rumors that restrictions as to the period of the lease, which, at present is generally of sixty years, may be imposed, limiting it to five years or so.

Offer Pulpwood Embargo at the Next Session

The *Financial Post* is authority for the statement that at the next session of the federal government, one of the members closely associated with the Quebec pulp industry and elected on an Independent-Liberal platform in this province, will introduce a bill to place an export tax of $10 per cord on pulpwood. The projected measure would virtually amount to an embargo on Canadian pulpwood, which would no doubt force some United States mills out of business. However, it is not believed that such a measure would be accepted by the house, unless the support of the government were first obtained. As far as can be seen at present, therefore, there appears little chance of such an enactment at the forthcoming session. It is interesting to compare this rate of $10 per cord with that proposed by the Canadian Pulp and Paper Association which was $1.50 per cord. Apparently the association's idea was to gradually shut off the supplies of pulpwood being sent for manufacture to the United States, rather than to take drastic steps.

Quebec a Dumping Place for Lumber

Gustave Piche, chief of the Forestry Branch of the Department of Lands and Forests for Quebec, declares that this province is becoming the dumping ground for lumber from the Pacific Coast due to the low cost of transportation via the Panama Canal, and he thinks Quebec should do something to protect its lumbermen who have played such an important part in the development of Eastern Canada. The greatest drawback to the lumber trade of the eastern provinces, he said, was undoubtedly this competition from the Pacific Coast and during 1925 over 2,000,000 feet of such lumber passed through the Panama Canal on its way to the Atlantic seaboard. Prior to the opening of the canal it cost from $25 to $30 per 1,000 feet to bring the timber from the Pacific Coast to Canada but now it is brought here at a cost of about $12 per 1,000 feet; approximately the rail freight rate charged between Ottawa and New York, Mr. Piche said. Added to their transportation advantages the lumber men on the Pacific Coast were cutting virgin forests and they were, therefore, able to supply timber in almost any lengths or thicknesses.

Price Brothers' Mill Capacity up 200 Tons

Price Brothers have obtained the power supply for their new 200 ton pulp mill at Little Discharge sooner than was anticipated; the result has been a speeding up of the work on this new mill which will raise the company's productive capacity from 575 tons of news print a day to 775 tons. It is understood that by the end of December, the full 200 tons will be placed on the market. This plant is generally known as the Riverhead Mill and is situated at the point where Lake St. John enters the Saguenay River.

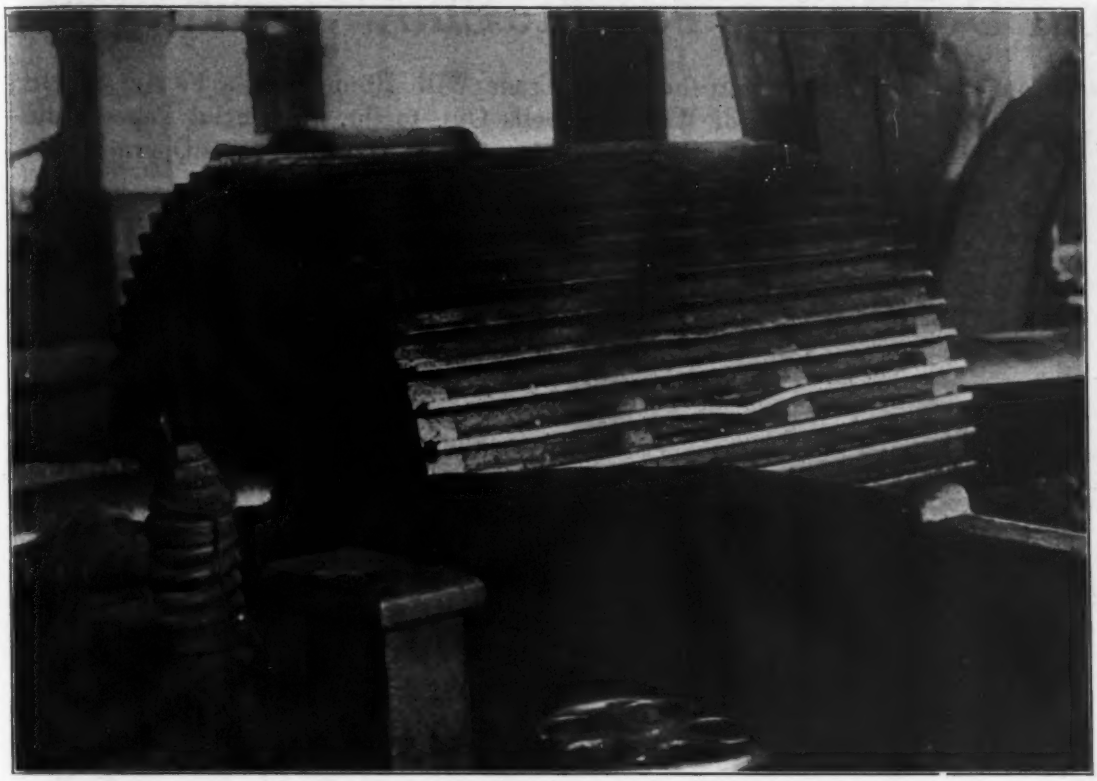
New Market for Kraft

What looks like a possible opportunity for the Canadian kraft paper industry is contained in the news that Norwegian paper makers are alarmed at the proposal to place a 17½ per cent duty on wrapping paper entering Britain. With a preference to the Dominions presumably allowed, this would increase the earnings of Canadian producers of kraft paper, such as Wayagamack or Dryden.

Byron Weston Co. Employees Insured

Another large New England industrial enterprise has recognized the value of group life insurance protection for wage earners, and as a result the 208 employees of the Byron Weston Company, paper manufacturer at Dalton, Mass., have been covered by a policy involving a total of $177,500.

This policy, which was placed by Harry Robinson, superintendent in Pittsfield for the Prudential Insurance Company, includes all employees of the Byron Weston Company, the protection being for amounts ranging from $500 to $1,000, according to the character of employment. Because of the large number of employees covered, no medical examination was required and each new employee will be eligible immediately upon enrollment.



Thirty Months on Roofing Rags!

This photo, just taken, shows a Dilts bandless roll and alloy fly bars after 30 months service in a felt roofing mill. The bars are worn to within 1¼" of the heads.

During its service this beater was charged 17,940 times and beat off 7,624¼ tons of raw rags. The rags came direct from the cutter and were beaten and finished by this roll.

In this mill the paper machine trims two "widths" of felt, (about 72") and closely averages 40 tons per day. It is served by five (occasionally six) 52" x 48" Dilts bandless roll beaters.

We doubt if any other beater on earth has a record that even approaches the performance of the Dilts keyed type bandless rolls and Dilts special alloy fly bars.
There are more than 600 Dilts bandless rolls in various paper mills today. Why not equip your mill also with Dilts bandless rolls and alloy bars?

"Your paper is made in your beaters."

Dilts

MACHINE WORKS, Inc. FULTON, N.Y.

EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

Paper Demand in Toronto Shows Good Increase

Judging From the Present Situation the Paper Trade Will Round Out a Fairly Satisfactory Year—John Martin Paper Co. of Winnipeg Sells Out to the Provincial Paper Mills—News Print Plant of the Beaver Wood Fibre Co., at Thorold, Starts Operating

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ontario, December 7, 1925.—Business in the paper line is going along with a smooth swing and it looks as if the volume done this month will exceed the corresponding period of last year. In the event of this materializing jobbers will be fairly well satisfied and will feel that they have rounded out a very fair year. They are now all busy on Christmas specialties. Box papers of all kinds are in good demand and there is a moderate call for cover and other allied goods. Paper box plants are rushed and all sorts of fancy containers are enjoying a strong market. Kraft paper, which was rather dull for some time, is in large requisition, and prices remain unchanged. The call for sulphate pulps is marked and the figure has advanced to $72.50 per ton. In the rag and paper stock market, trade is very good and, on the whole, the paper business faces 1926 with brighter prospects in turnover and demand than it did a few weeks ago.

John Martin Paper Co. Sells Out

The John Martin Paper Company, Limited, of Winnipeg, with branches at Calgary and Edmonton, which is one of the biggest wholepaper concerns in Canada, has sold out to the Provincial Paper Mills, Limited, Toronto, which have four manufacturing plants and are the largest makers of book papers in Canada. The new owners will operate the distributing business of the John Martin Paper Company, until the end of the present year under the old name of the firm when a separate organization may be formed under a new title to look after the wholesale trade in the western provinces. The object of the Provincial Paper Mills in taking over the Martin concern is to establish a closer working relationship in the west between the mill and customers. Other lines of paper will be handled as well as book, writing, etc. The warehouse facilities will form a direct outlet for the output of the Port Arthur plant of the Provincial Paper Mills, which specially caters to the interests of the west. John Martin, head of the John Martin Company, and A. C. Hunt, vice president and general manager, will, it is understood, continue with the new holding interests, at least for some time. The change is one of the most important that has taken place in the Canadian wholesale paper trade during the past year. Mr. Martin is a former president of the Canadian Paper Trade Association and Mr. Hunt is one of the vice presidents of that body.

Leading Paper Houses Merge

The business and staff of the Allen Paper Company, Toronto, has been merged with the United Paper Mills, Spadina avenue, Toronto, the change taking place last week. Charles Allen, who for many years has been connected with the wholesale paper trade and is widely known to the printers of Canada, becomes sales manager of the united concerns, and H. G. French, late secretary-treasurer of the Allen Paper Company, is accountant in the new organization, of which R. I. Finlay, late head of the Canadian Paper Trade Association, is the President. The Allen Paper Company was established five years ago by Charles Allen, who previous to that period, was associated with the Buntin, Reid Company, Toronto, for a quarter of a century. The United Paper Mills state that a larger and more varied stock will be carried under one roof and that an improved telephone and delivery service will follow as the result of the merger.

New Newsprint Mill Starts

The new newsprint plant of the Beaver Wood Fibre Co., Thorold, Ont., has been put in operation, the new 166 inch wide Pusey & Jones machine starting up last week. The output will be about seventy tons daily. The machine is steam driven and possesses every modern equipment. It has thirty-four driers, seventy-five inch suction couch, two Bird screens, Ross ventilating and Trimbley mixing system. John Ball is the resident engineer of the plant, the output of which has been contracted for and steady operation assured. The Beaver Wood Fibre Company, is running its two board machines to capacity and the installation of a news print department makes the number of hands employed in the establishment around three hundred.

New Pulp Mill on Manitoulin Island

The new ground wood pulp mill, which has been erected on the Kagawong river, Manitoulin Island, Ontario, by the Little Rapids Pulp Company, Little Rapids, Wis., will be in operation within a few days. The construction contract has been completed by McLarty Brothers, Sault Ste Marie, Ont., including the water canal, head works, stop gates, etc. The steel and wood penstocks are also finished and all the buildings with the exception of the storage warehouse. The docks and tramways are also in position and practically all the equipment with the exception of the water wheels, which are well under way and will be ready in a few days, when ground wood pulp will be turned out at the rate of twenty to twenty-five tons daily.

New Member of the Firm

H. A. Goldsbrough, who has been associated with the Canadian and European offices of the Hodge-Sheriff Paper Company for the past seven years, has been taken into partnership. The title of the firm will remain the same. Mr. Sheriff left Toronto during the past few days on a trip to England. The Hodge-Sheriff Paper Company which has offices in Toronto, Montreal, London, Eng., and other points, is the selling agent for the Wayagamack Pulp and Paper Company, of Three Rivers, Que, which is the largest manufacturer of kraft paper in the British Empire.

New Paper Box Plant

The Frontenace Paper Box Company, late of Kingston, has removed to Belleville and is one of several new industries recently starting in the latter place. The company is a subsidiary of the Fisher Paper Box Company of Toronto, and considerable capital has been invested in the enterprise by Belleville residents, where the head office and plant are now located.

General News of the Industry

Ernest C. Martin, of the Interlake Tissue Mills, Toronto, spent the past week in Montreal on business.

J. H. Black, general manager of the Spruce Falls Company, whose plant is located at Kapuskasing, Ont., spent the past few days at that point. He stated on his return that he had nothing yet to give out, in regard to the reported program of the activities of the company.

John Martin, President, and A. C. Hunt, general manager of the John Martin Paper Company, Winnipeg, were in Toronto last week on business.

The head office of the Mattagami Pulp and Paper Company, whose plant is at Smooth Rock Falls, Ont., has been removed from the Bank of Hamilton building to the new Northern Ontario building, corner of Adelaide street west, and Bay street, Toronto, which structure is rapidly becoming a center for pulp and paper company offices.

At a recent meeting of the Ontario county council at Whitby, that body was asked by the Reforestation Committee to consider the purchase of 973 acres of land in Uxbridge township at $10,63 per acre for a county reforestation scheme.

DYES FOR BLOTTING PAPER

THIS class of paper calls for shades of considerable brilliancy, and requires the use of colors suitable for application without size or alum. For this purpose we recommend National Direct Dyes used alone or in combination with the National Basic Dyes. With a selection of dyes from these foregoing groups, the paper dyer is in a position to match practically every shade submitted or to add to his present line of shades.

National Aniline & Chemical Co., Inc.

40 Rector Street, New York, N. Y.

BOSTON	PHILADELPHIA	SAN FRANCISCO
PROVIDENCE	CHICAGO	MONTREAL
HARTFORD	CHARLOTTE	TORONTO

NATIONAL DYES

Fox River Valley Safety Conference at Green Bay

Paper Mills Prominently Represented at the Meeting at Which Judson G. Rosebush Makes One of the Principal Addresses—DePere Pulp & Paper Co. to Start Plant at West Pere Early in 1926—Course in Pulp and Paper Manufacturing To Begin in January

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., December 11, 1925.—All Appleton paper mills and their allied industries were represented by executives, foremen and employees at the Fox River Valley Safety Conference which was held in Green Bay on Wednesday. Some of the paper mills of the valley sent as many as 25 delegates to the meeting.

The paper industry played a prominent part in the conference. It was sponsored by the American Pulp and Paper Mill Superintendents Association, the Paper and Pulp Section of the National Safety Council, besides the state industrial commission and other agencies. The general chairman of arrangements was W. J. Peacock, of the Northern Paper Mills, of Green Bay. The arrangements committee also included W. F. Ashe, of the Thilmany Pulp and Paper Company, of Kaukauna, M. G. Hoyman, of the Kimberly-Clark Company, of Neenah, L. Larsen, of the Marinette & Menominee Paper Company, of Marinette, besides H. S. Menzel, Appleton, of the Wisconsin Industrial Commission, and a number of others.

Big Attendance at Banquet

Sessions were held in the new Hotel Northland in the morning, afternoon and evening, the evening meeting being in connection with a banquet. The attendance at the banquet was 647, of which a large number were Green Bay persons. Hugh G. Corbett, secretary of the Appleton Chamber of Commerce, extended an invitation in behalf of the Appleton industries to hold the 1926 meeting in Appleton.

The committee in charge was so pleased with the success of this first safety conference of the Fox River Valley that steps were taken to make the conference an annual affair.

Remark by Judson G. Rosebush

Safety work, according to Judson G. Rosebush, head of several paper mills in the valley, is "the most striking manifestation of the Christian religion that exists in modern life. He said it stresses the priority of human values and preserves life at its lower levels that it may be enjoyed at its higher levels. Mr. Rosebush spoke on "The Why of the Safety Movement." He also was one of the principal speakers at the National Safety Conference in Cleveland this fall. On the program with Mr. Rosebush during the banquet was Carl L. Smith, Chicago community safety expert and field representative of the National Safety Council.

"Compensation does not compensate a violinist for the loss of the third finger of his left hand," Mr. Rosebush said. "It cannot compensate the worker whose face is disfigured for life; it cannot compensate a family for the loss of the guidance and companionship and counsel of the father who was killed when the boiler exploded."

He traced the safety movement's history from its beginning to the present, declaring that there is still much to be done, and that this country's yearly accident toll is greater than the loss it suffered in the nineteen months of the World War, and that the annual loss cost of industrial casualties totals $800,000,000.

Safety work, in addition to its humanitarian aims, is beneficial as an agency to promote good will between the plant and the office, he said. It affords a constant contact between employers and employees at a point where the employees' interests are paramount, and remove from capital the accusation of ruthlessness.

"Why not organize this Fox River Valley Safety Conference into the Fox River Valley Safety Council?" asked Carl L. Smith in his address. He then told of the steps necessary for success.

First would come an engineering and control survey. This would involve a study to determine the greatest hazards. Second would come a campaign of education. The teaching of safety, like charity, he said, should begin in the home.

De Pere Paper Mill to Start Soon

Early in 1926 the manufacture of paper will be started in the former Davis Boiler Works plant at West De Pere by the De Pere Pulp and Paper Company, of which Morris Miller of Green Bay, Wis., is the head, it was announced this week.

Nearly all of the macchinery has been installed in the building and one paper machine will be put in operation within one month, it was learned.

The new concern will employ 35 men in the manufacture of tissue and other paper. There is room in the building for two more paper machines, and it is the intention of Mr. Miller to add machines within the next two years, it is said.

An investment of $100,000 will be represented in the plant and equipment when operations are started. Mr. Miller and others associated with him have used only their own capital in preparing the plant for the manufacture of paper.

Island Paper Co. Hearing Postponed

The hearing of claims against the Island Paper Company of Menasha which went into receivership a few weeks ago was to take place in circuit court at Oshkosh December 1, but the hearing has been postponed until March 1. Hugh Strange of the John Strange Paper Company, Menasha, was appointed receiver for the plant.

Paper Instruction to Start in January

The course in pulp and paper instruction for which the school board of the Appleton vocational school had arranged this winter, will be started in January. Harold C. Noyes, of Rumford, Me., pulp and paper instructor in the vocational school in charge of industrial training in the Oxford Paper Company plant at Rumford, has been engaged as instructor for the new course, and will move with his family to Appleton about January 1.

It is fitting that Appleton, which claims to have built the first vocational school in America should also establish the first paper and pulp manufacturing course in a Wisconsin school. The course will, however, not be taught in Appleton, alone, for this city is cooperating with the vocational schools of Kaukauna, Neenah and Menasha, other paper mill towns of the Fox River Valley, and Mr. Noyes is being employed jointly by the school boards of all four cities. He will make his home in Appleton and will spend about half of his time here.

Incorporating a course in pulp and paper instruction in the vocational school curriculum is the result of a long study of the paper industry here and in the nearby towns where Mr. Noyes will teach, and of the conferences between officials of the schools and paper manufacturers of the Fox River Valley. It is expected that this vocational training service will soon be extended to all the cities of the valley, and later to the paper mill communities of the Wisconsin River Valley. The Green Bay vocational school is now considering the matter.

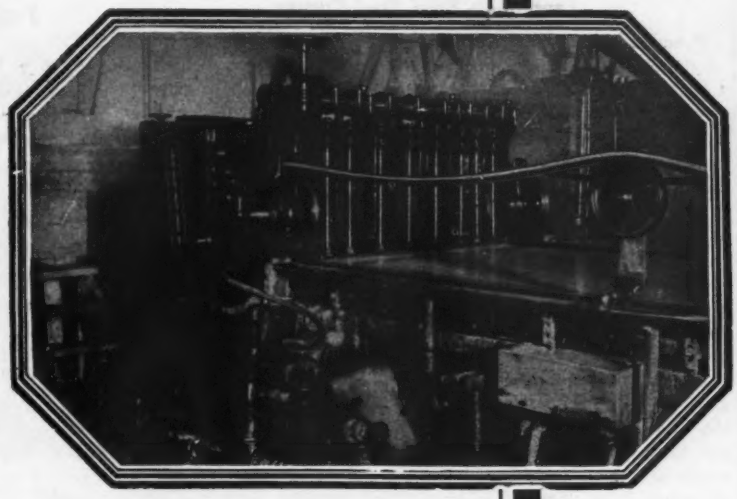
The only other work of this kind in the United States is to be found in the paper manufacturing districts of Maine, Massachusetts and in certain sections of the Miami River Valley in Ohio.

Mr. Noyes comes to Appleton very highly recommended by H. L. Pride, Augusta, Me., state superintendent of trade and industry, and S. E. Patrick, Augusta, state director of vocational schools.

Herman Elsas Visits Paper Mills

Herman Elsas, of New York City, president of the Continental

19 Manufacturers Prepare For Better Business



During the past sixty days nineteen large manufacturers of paper commenced preparations for better business that will develop in 1926. Their preparations will make it possible for them to produce better paper at a greater speed and at a lower cost.

Their paper will from now on be of better formation, even in caliper and in most cases an increase in production of more than 10% will result. Uniform characteristics of their papers will be maintained and the quality will always be the same, always the highest.

This will be accomplished by the Voith High Pressure Stock Inlets they are installing. Six of these manufacturers already have one or more of the new Inlets and are putting in others. Let your product be produced under the proper conditions by installing the Voith Inlet. Your copy of an illustrated booklet is ready telling of the patented Inlet and what it will do for you. Write for it today.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Ave.

Don't Stand Idle While Others Are Preparing

Paper and Bag Mills Corporation, was in Marinette and Oconto Falls last week visiting the Marinette & Menominee Paper Mills and the Falls Manufacturing Company. Important reorganization matters were considered as the result of the death recently of James H. Delbridge, president and manager of the two mills.

Paper Mills Erect Steel Towers

Erection of the 265-foot steel towers which will carry the wires of the Northern Paper Mills and the Wisconsin Gas and Electric Company across the Fox River was started this week. In general design the towers are of the same design as those erected along the line except that they are more than three times as high. The base is 50 feet square and the posts are set in concrete. Steel work in each tower weighs 37½ tons.

Shipping Pulpwood from Wisconsin

At least 5,000,000 feet of pulpwood will be shipped to Appleton this winter from northern Wisconsin. Shipping of logs usually starts earlier, but the weather this year has not been cold enough to make lumbering possible on an extensive scale. It is expected that the pulp shipments will begin in a few days. About 25 carloads will arrive in Appleton every day when the shipments are started. The logs are in northern Wisconsin along the route of the Wisconsin and Northern branch of the Minneapolis, St. Paul and Sault Ste. Marie Railway, from Gresham in Shawano County northward through Langlade County and up to Crandon. Log shipments from northern Wisconsin will continue throughout the winter.

To Be Assistant Superintendent

At the DePere plant of the American Writing Paper Company, Ray D. Terrien has been promoted to assistant superintendent, according to an announcement by Charles E. Garvin, manager and superintendent, who made the appointment. He will assist Mr. Garvin and relieve him of a number of his duties. He is already quite familiar with the work as he has been in close touch with the manager for several years.

Big Shipment of Pumps from Appleton

A big shipment of pumps for use in the manufacture of paper left Appleton last week for Kenora, Ontario, Canada. They were manufactured by the Hayton Pump and Blower Company, of Appleton, for the Backus-Brooks Company of the Canada City. The shipment consisted of eighteen pumps and filled three freight cars. The largest of the pumps was a triplex plunger weighing 15,000 pounds, and another was an anti-acid bronze pump. The pumps are all to be used in a new addition to the paper mill of the Backus-Brooks Company.

Officers of American Tablet Co.

Officers are about to be elected by the American Tablet and Stationery Company whose purchase of the property of the American Tablet Company at Green Bay was recently completed.

Prominent figures in the new concern are William Albrecht, of St. Joseph, Mo., and W. W. Sunderland, of West Carrolton, Ohio. Both of these men are heads of large tablet factories, and Mr. Sunderland also is president of a paper mill at West Carrolton, from which it is expected that a large part of the stock to be made into tablets here will be obtained.

Henry Forberg, who has been manager of the American Tablet Company, will retain that position with the new firm, as will W. J. Bertrand, secretary. W. W. Race, president of the American Tablet Company, will retire. Some of the stockholders are staying with the new firm and others are dropping out.

It is planned to operate the plant on N. Webster avenue to capacity, and even may be necessary to seek larger quarters.

To Represent Karlstads Mekaniska Verkstad

G. L. Hellstrom, for ten years associated with Messrs. Boving & Co., of London, Eng., in charge of their pulp and paper machinery division, is now the sole representative for North America for Messrs. Karlstads Mekaniska Verkstad of Sweden, with headquarters at 113 St. Mark street, Montreal, Quebec. Mr. Hellstrom is a well known Swedish engineer and has long been identified with the development of pulp and paper mill machinery.

Paper Demand Continues Good in Boston

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, MASS., December 14, 1925.—With another week of excellent business just recorded, paper dealers in this territory have already conceded an unusually good year, 1925 being well in the lead over 1924, according to the majority of reports. It is the general concensus that the steady influx of business which started in October will continue until at least the middle of January.

All branches of the trade have enjoyed a wholesome amount of business with the possible exception of the paper stock market houses. Lately the coarse division has taken the lead so long maintained by the fine grade houses. This recent rush of orders for the coarse papers came with the holiday business and in many quarters the real Christmas demand is now being made. Orders in this branch of the business were held until the last moment this year, it is explained. As a result the inrush has caused some confusion but not enough to prevent any of the houses taking care of all their orders. Through it all prices have remained the same, the report that kraft would take a jump, apparently being without foundation.

On the other hand the houses dealing in the fine grades have had about all the business they could take care of comfortably. It has been a steady demand since early fall and there is no indication of any letup at this writing. Printers appear to be busy, advertising houses are at their peak now going after new business for 1926—and going after it through the medium of the written word which means paper and plenty of it.

Sales campaigns are on and in every quarter there seems to be activity that calls for the use of a varied assortment of fine grade papers. Prices in this division also remain unchanged.

The paper box manufacturers are enjoying better business and the demand for material is coming in constantly. The holiday trade proved a great benefit to this industry as it had not enjoyed the same amount of good business that the other branches had during the last two or three months. However, this branch of the trade, like the others, forecasts a bright era ahead and says it is grateful for the good business of 1925, which was a great improvement over 1924.

Little change is noticed in the raw stock and division business being quiet with the mills and their buying policy little changed.

Sterling Fibreboard Co. Takes Over Old Mill

[FROM OUR REGULAR CORRESPONDENT]

SOUTH COVENTRY, CONN., December 15, 1925.—The Sterling Fibreboard Company have taken over the old mill at South Coventry, and plan to begin operations in about two months' time. The mill is to be operated for experimental purposes and the Sterling Fibreboard Company expects to make a feature of water proof and varnish proof fiber board specialties and hard fiber substitutes. The machinery is being rebuilt and everything is being put into first class order. George Maynard, formerly with the American Fibre Chair Seat Corporation, of Long Island City, N. Y., has been engaged as superintendent.

Bayless Paper Co. Sells Timber Tract

BINGHAMTON, N. Y., December 14, 1925.—Announcement was made last week that the Bayless Pulp and Paper Company of Binghamton, with mills in Austin, Pa., had sold its timber tract, covering 350 square miles constituting the St. Anne River watershed in Canada, to a syndicate. The names of the purchasers were withheld.

The price was more than $2,000,000. A large sulphite and news print mill will be erected at Beaupre, Quebec. The Bayless company will retain stock in the new company.

Stories Without Words

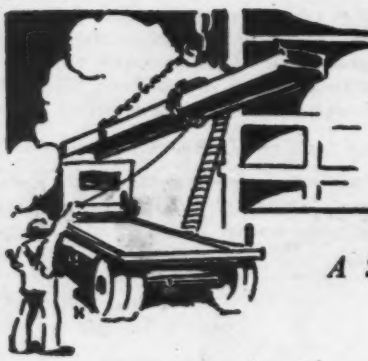
In the land of midnight sun and noon day twilight, there is a people without an alphabet. Yet the urge of autobiography is present, and long hours of aurora-lighted leisure are spent in transcribing on some unwilling medium—a walrus tusk at best—"The story of my adventures."

The exploits of hunters, the experiences and observations of travelers, the researches of historians, the philosophy of great men, all stimulate imagination, broaden outlook and contribute to the pleasure and effectiveness of living.

We are heirs to the benefits others have obtained from mixing with the world. Their words, multiplied millions of times in books and newspapers, become the property of all mankind. In this respect we have an immense advantage over past generations. No walrus-tusk limitation is ours. We have paper at our call.

Hammermill Paper Company

Erie, Pennsylvania



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Richmond, Va.—Charles Pohlig, 2407 East Franklin street, manufacturer of paper boxes and containers, has awarded a general contract to the James Foss Sons' Company, 25th and Franklin streets, for the erection of a three-story addition, 45 x 65 feet, estimated to cost about $26,000, of which approximately one-half will be expended for additional machinery. Scott Rice, Richmond, is architect.

East Rutherford, N. J.—The New Jersey and New York Wax Paper Company is said to be planning for the establishment of a new local plant to replace its works in a leased building at Oak street and the Erie Railroad, recently destroyed by fire with loss estimated at close to $30,000, including equipment. The new mill is expected to cost approximately a like amount.

Seneca Falls, N. Y.—The DeLaven Box Corporation, recently organized by D. H. DeLaven, Seneca Falls, and associates, has plans under way for the establishments of a new local plant for the manufacture of paper boxes and containers. It is proposed to lease a building and install machinery. The project will be consummated at an early date.

Waterville, N. H.—The Parker-Young Company, 131 State street, Boston, Mass., pulp and paper products, is said to be concluding negotiations with the International Paper Company for the purchase of a tract of 22,000 acres of local timber lands. The new owner plans the early erection of a saw and lumber mill on a portion of the site to develop a supply of raw material for its pulp mills at Lincoln, N. H. Operations will be increased at the last noted plant, with expansion in present output under consideration.

Syracuse, N. Y.—The Jordan Paper Box Company, 242 South Salina street, has rejected bids recently received for extensions and improvements in its plant, reported to cost about $30,000. Revised plans will be prepared and new bids asked. It is likely that actual work will now be deferred until early in the spring. La Vaute & Mulranen, Herald Building, Syracuse, are architects. Charles Jordan is president.

Warren, Ark.—C. J. Mansfield, president of the Arkansas Lumber Company, Warren, is said to be at the head of a project to construct and operate a new paper mill in this section. The initial plant is reported to cost in excess of $200,000, with machinery.

Los Angeles, Cal.—The Eureka Paper Box Company has completed plans and will soon proceed with the construction of its proposed new two-story plant at Twentieth and Tarleton Streets, to be 65 x 120 feet, estimated to cost approximately $45,000, with equipment. John M. Cooper, Rives-Strong Building, is architect.

Los Angeles, Cal.—The Thomas Paper Converting Company will soon proceed with the construction of a new one-story, brick and steel mill at Santee and Washington streets, to be 100 x 150 feet, costing close to $90,000, with machinery. The Austin Company of California, 777 East Washington street, Los Angeles, has the general contract, and will also act architect for the structure.

Muskegon, Mich.—The Central Paper Company will begin the immediate replacement of damage recently caused by fire at its local mill, originating through a defective flue. An official estimate of loss has not been announced.

New York, N. Y.—The Beekman Paper and Card Company, i318 West 39th street, has leased additional space in the building at 137-41 Varick street, for extensions, and will occupy at an early date. The property has been taken over for a long term, with lease aggregating $400,000. Max Greenebaum is president.

Cincinnati, Ohio—The Bishopic Manufacturing Company, Spring Grove, and Eastes avenues, has arranged for the erection of another addition to its plant for the manufacturing of wall board and fiberboard products, to be two and three-story, 63 x 120 feet, estimated to cost approximately $55,000. A general building contract has been awarded to the Ferro Concrete Construction Company, Third and Elm streets, Cincinnati. Benjamin DeCamp, Gerke Building, is architect. Allison Bishopic is president.

Williamstown, Pa.—Bryon White, operating a local factory for the mannufacture of paper boxes, cardboard specialties, has arranged for the removal to the Charles Rennebaum Building, near Clayton avenue. It is expected to increase the capacity.

Anacortes, Wash.—The Fidalgo Pulp Company is planning for the immediate rebuilding of the portion of its local mill recently destroyed by fire. An official estimate of loss has not been announced. Additional equipment will be installed. C. B. Everitt is general manager.

New York, N. Y.—Jacob Sonn, 113 West 17th street, New York, manufacturer of paper boxes and containers, has leased a floor in the building at 135 West 17th street for extensions in his plant. Equipment will be installed at once.

Philadelphia, Pa.—M. P. Philpot & Company, 134 North Front street, manufacturer of paper boxes and containers, are reported to be planning the immediate rebuilding of the portion of their plant recently destroyed by fire with loss estimated in excess of $15,000.

New Companies

Lowville, N. Y.—The Smith-Lewis Fibre Can Corporation has been incorporated with a capital of 10,000 shares of common stock, no par value, to manufacture fiber and paper cans, containers, etc. The incorporators are H. W. and L. Smith, and H. S. Lewis. The company is represented by D. E. Griffith, Lowville.

Richmond, Va.—The McCall Company has been incorporated with a capital of $30,000 to manufacture tissue paper specialties, etc. The company is represented by F. T. Bates, Jr., 2100 Barton avenue, Richmond.

New York, N. Y.—The Beebe Mills, Inc., has been incorported with a capital of 3,000 shares of stock, no par value, to manufacture paper products. The incorporators are I. L. Beebe, Jr., and H. M. Fancher. The company is representel by C. Kimball, attorney, 47 West 34th street, New York.

Newark, N. J.—The Lillie Wastepaper Company has been incorporated with a capital of $125,000, to deal in waste paper.

(*Continued on page 36*)

Pounds or Tons
Dodge can Build it

The Dodge organization is keeping pace with the growth, requirements and increasing demands of world industry.

Dodge engineers are applying the Dodge principle of standardization, ruggedness and economy of operation to the ever changing requirements of industry for the most modern in power distributing and production equipment. The engineering experience and unusual manufacturing facilities of this big organization of specialists is at your service whether your problem be one of power distribution, materials handling or special machinery.

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Obituary

John R. Booth

OTTAWA, Ont., December 14, 1925.—John R. Booth, aged 98 years, pioneer Canadian lumber man and pulp and paper manufacturer whose death Tuesday, December 8, was briefly mentioned in the PAPER TRADE JOURNAL last week, started his business life with a capital of $6 and accumulated a fortune of many millions.

Although best known through his lumbering experiences, his name is venerated among railroad men. Going to the assistance of the Canada Atlantic Railway when it was under construction in

JOHN R. BOOTH

1878 and was mired in financial difficulties, he completed the 500 miles of track and put the line on a sound financial footing. After building the railway, he developed the trade for it by building elevators, purchasing steamships and buying wheat and other freight. When the line was sold in 1904 with the Parry Sound Railway, which he also built, to the Grand Trunk Railway, now part of the Canadian National, Mr. Booth pocketed $14,000,000. In recent years he had been a large manufacturer of wood pulp and print paper.

Of Irish stock, "J. R.," as he was familiarly known, was born in Waterloo, Shefford county, Quebec, April, 1827. As a boy he worked on his father's farm in summer, did the chores in winter and in his spare time went to school. After marrying Miss Rose Cook, a neighbor's daughter, he decided there was a larger future elsewhere. With a working capital of $6 he began to do carpentry work on the Vermont Central Railway. Later he came to Ottawa and after a time acquired a small mill. A contract to supply lumber for the first parliament building of Canada gave him his real start.

Within ten years after settling in Ottawa Mr. Booth purchased a $45,000 timber limit. From then on he acquired tract after tract until he owned more than 4,000 square miles of timber limits, which extended west to the waters of the Great Opeongo and the Madawaska, north far into the Province of Quebec, and east and south to Burlington, Vt.

The little shingle mill which he rented at Ottawa gradually increased in size, until today it is one of the largest of its kind in the world. Pulp and paper have been added to the plant's output, and more than 2,000 persons are employed.

Mr. Booth was not a politician, but on one occasion he did extend himself in this direction. This was in 1911, when he addressed a large gathering of his employees against the Taft-Fielding reciprocity plan, speaking from a woodpile in the Booth lumber yard. To these woodpile speeches the Government attributed in no small measure its defeat.

When King George visited Canada he was the guest of the lumberman on a crib of lumber on its journey through the sluices. Mr. Booth served his royal guest a real shanty dinner of pork and beans.

Mr. Booth was a director of the Grand Trunk Pacific Railway, President of the Dominion Nickel and Copper Company and a director of the Canada Cement Company.

Mr. Booth was one of the first to appreciate the importance of hydro-power development, particularly on the Ottawa river at the Chaudiere, and the huge lumber and pulp industries that are now established at Ottawa bearing his name, are the fruit of his foresight, his unflagging diligence, and the confidence which was always a part of his business attitude. He acquired vast areas of timber lands, adding largely to his holdings in years when other lumbermen moved more cautiously or were marking time. He was quick to see the future of the pulp and paper industry and to make provision for participation therein. He built and owned the Canada Atlantic Railway, which he afterwards sold to the Grand Trunk, and which is now a part of the Canadian National System; he had use for a railway in and for his business, and he built it, that being characteristic of the man and his methods. The secret of his success lay, perhaps, more in the constant personal attention that he gave to every detail of his business than in any other single factor. He drove daily to his mills, year in and year out, and missed nothing of what was being done. He was as familiar in a suit of overalls as in an office suit, and the personal touch was felt in all the ramifications of his far-stretching enterprises. Personally, he was comparatively little known outside of Ottawa.

Raymond E. Parker

CHICAGO, Ill., December 12, 1925.—Raymond E. Parker, Treasurer of the Parker, Thomas and Tucker Paper Company, 520 South Canal street, Chicago, died suddenly of heart disease at his home, 1538 Fargo avenue, Wednesday evening. His death comes as a great blow to the Chicago paper field, especially so because the end came so suddenly, without any warning even to his nearest relatives.

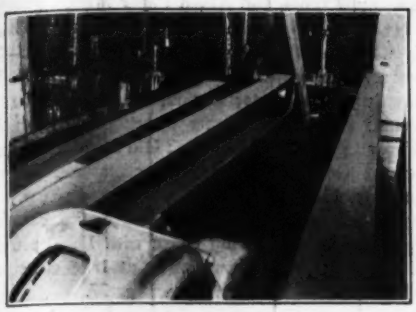
The couse of Mr. Parker's death is said to be indirectly from

RAYMOND E. PARKER

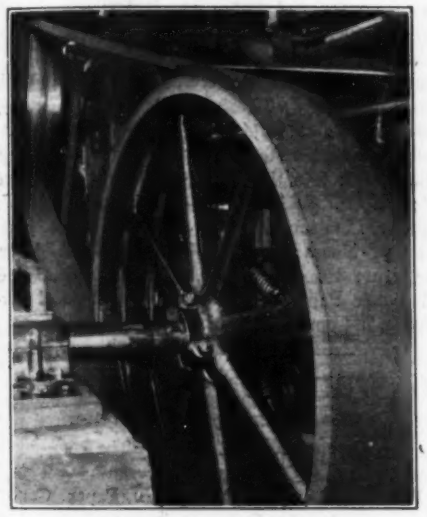
acute indigestion, although the direct cause was an attack of heart disease.

Mr. Parker was 53 years old. For eighteen years he was connected with the J. W. Butler Company as salesman. He was known in all fields of paper ,and his name is at the present time on the tongues of every paper man in Chicago.

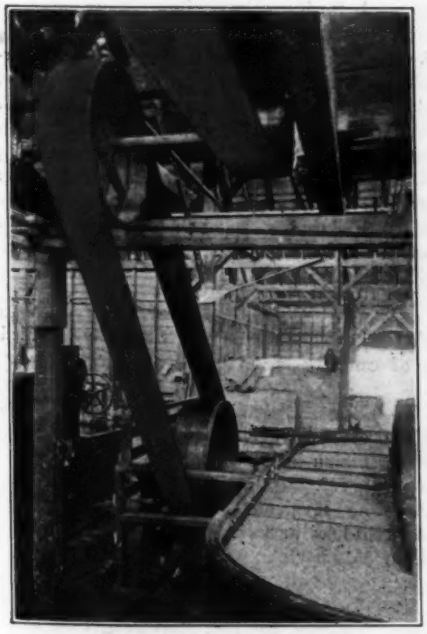
(*Continued on page 58*)



12-inch 6-ply Rainbow Belts driving No. One Jordan Grinders.



Main drive, 18-inch 8-ply Rainbow Belt.



Beater drive, 12-inch 6-ply Rainbow Belt.

Driving Pulpwood Through to Finished Paper Stock

It's a long line of power transmission that carries a mill product from the stage of pulpwood, waste paper or rags through to the finished paper stock. It takes a good transmission belt to make that line a strong one.

"U. S." Rainbow Friction Surface Belting has stood the test of drives at every stage of paper and pulp manufacture. Its strong, specially woven duck fabric is impregnated with high quality rubber friction, and the proper amount of stretch is taken out before it leaves the factory.

Whether on main drive or driving the smallest roll, "U. S." Rainbow Belts mean few interruptions of service. The photographs show the variety of work which they are doing in one Western paper mill. They can probably do as much for you.

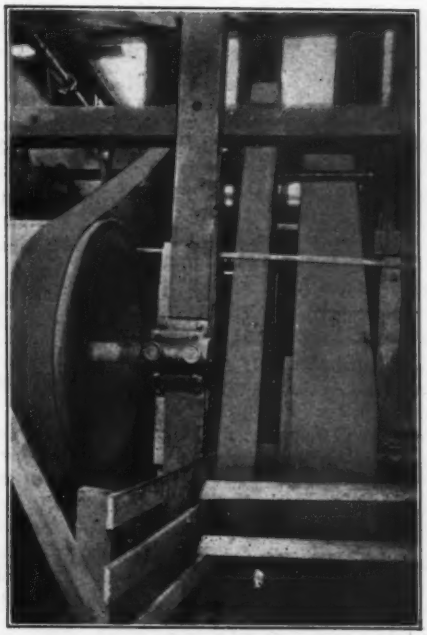
Refer to our nearest branch for a careful survey of your belting needs and an explanation of how "U. S." rubber belting fits in.

The United States Rubber Company manufactures a broad line of rubber goods for paper and pulp mills, including rubber covered rolls (Couch design, felt carrying, inking, marking, press, pressure, size, waxing, wringer), conveyor belting, transmission belting, deckle straps, fire hose, steam hose, water hose, machine hose, suction box connections, pump valves, hard rubber acid buckets and pitchers, doctor blades, hard rubber pipe and fittings.

United States Rubber Company

1790 Broadway New York City

Branches in all industrial centers



Machine drive, 18-inch 8-ply Rainbow Belt.
Counter shaft drive, 8-inch 5-ply Rainbow.
Press drive, 8-inch 5-ply Rainbow.

Trade Mark

New York Trade Jottings

H. P. Gould, president and treasurer of the Gould Paper Company, of Lyon Falls, New York, spent a few days in the city last week.

* * *

G. A. Ware, of the News Print Service Bureau, 342 Madison avenue, New York, is inspecting the principal paper mills in Canada, and plans to return in time for the festive season.

* * *

R. Erik Serlachius, of the G. A. Serlachius Company, of Mannta, Finland, owners of one of the oldest mills in that country, is making a comprehensive study of the pulp and paper industry in the United States, and expects to remain here for some considerable time.

* * *

Atterbury Brothers, Inc., of 145 Nassau street, New York, importers of, and dealers in paper mill supplies, announce that their paper stock department will in future be in charge of William Roach and J. J. Byrnes, both of whom are well known in the paper industry.

* * *

The George A. Lehman Paper Company, Inc., of 200 Fifth avenue, New York, has filed a schedule in bankruptcy, with liabilities of $13,119 and assets of $362. The principal creditors are Kupfer Brothers, $3,235, the Anseco Company, $3,429, and the A. M. Collins Manufacturing Company, $1,204.

* * *

Hans Lagerloef, president and treasurer of the Lagerloef Trading Company, Inc., of 52 Vanderbilt avenue, New York, sailed for Sweden last Wednesday, aboard the new Swedish American motor liner *Grepsholm*. Mr. Lagerloef, who was accompanied by his wife and daughter, plans to visit Finland during his trip to Scandinavia.

* * *

The Varick Spring Corporation has rented additional space in 137-139-141 Varick street to Max Greenebaum, president of the Beekman Paper and Card Company. The lease is for a long term and aggregates about $400,000. The building, a nine-story fireproof, 100 per cent sprinklered structure, is one of the finest and heaviest constructed of its type, having a floor capacity of 300 pounds to a square foot.

* * *

Rex Harvey, technical director, of the Abitibi Power and Paper Company, Iroquois Falls, Ont.; E. P. Cameron, chief of the Pulp and Paper Section of the Canadian Forestry Laboratories, Montreal, Que.; Dr. A. R. M. MacLean, of J. T. Donald & Co., consulting chemists, Montreal, Que.; G. P. Genberg, chief chemist of the Fraser Companies, Edmundston, N. B., and T. Lindley Crossley, president of the Industrial Laboratories, Ltd., Toronto, Ont., were among the Canadian trade visitors in New York last week.

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 16.—The Government Printing Office has received the following bids for 500 pounds Manila tissue paper, 12 x 18: R. P. Andrews Paper Company, 24.625 cents per ream; Whitaker Paper Company, 25 cents; Mathers-Lamm Paper Company, 15 cents; Barton, Duer & Koch Paper Company, 21.5 cents; Maurice O'Meara Company, 32.5 cents; Reese & Reese, 29.5 cents; Lindemeyr & Harker, 20.75 cents.

The Printing Office also has received bids for 20,000 pounds white M. F. lithograph printing paper, cut 19 x 24—38, as follows: R. P. Andrews Paper Company, 6.8 cents per pound; Mathers-Lamm Paper Company, 9.4 cents; Whitaker Paper Company, 8.23 cents; Virginia Paper Company; 6.59 cents; American Writing Paper Company, 8.25 cents; the Baxter Paper Company, 7.25 cents; Reese & Reese, 6.82 cents; Lindemeyr & Harker, 7.95 cents; Bryant Paper Company, 7 cents, and Allied Paper Mills, 7.5 cents.

Bids have also been received by the Government Printing Office for 12,900 pounds white bond paper, 50 per cent rags, 21 32—43, No. 24, as follows: Aetna Paper Company, 14.87 cents; R. P. Andrews Paper Company, 16.5 cents; Barton, Duer & Koch Paper Company, 14.85 cents; American Writing Paper Company, 15.85 cents; Whitaker Paper Company, 14.97 cents; Old Dominion Paper Company, 20.49 cents; Reese & Reese, 16.27 cents, and Barton, Hobart Paper Company, 15.65 cents.

The Aetna Paper Company has been awarded the contract for furnishing the Government Printing Office with 13,200 pounds (400 reams of 82 x 34—33) white bond paper at 17.68 cents per pound, bids for which were received on November 27.

The Old Dominion Paper Company will furnish 3,500 pounds of various sizes back lining paper at 4.29 cents per pound, bids for which were received on November 20.

Barton, Duer & Koch has been awarded the contract for furnishing the Government Printing Office with 12,900 pounds (300 reams) of 21 x 32—43, 50 per cent rag white bond paper at 14.85 cents per pound, bids for which were received on December 4.

The Government Printing Office has received the following bids for 40,000 pounds Chip Board: 20,000 pounds cut 28½ x 34½ No. 100 and 20,000 pounds cut 21½ x 32½, No. 140: The La-Boiteaux Company, $41.50 per ton; Virginia Paper Company, $44.90; Philip Rudolph & Son, Inc., $43.00; United Paperboard Company, $44.10; R. P. Andrews Paper Company, $47.67; Mathers-Lamm Paper Company, $39.10; Whitaker Paper Company, $42.21; Maurice O'Meara Company, $44.50; Dobler & Mudge, $42.50 less 3 per cent; Reese & Reese, $40.95; Lindemeyr & Harker, $42.50; Republic Paperboard Company, $41.60; and Barton, Duer & Kock Paper Company, $43.65.

CONSTRUCTION NEWS

(*Continued from page 32*)

The incorporators are G. and Louis Hoffman. The company is represented by Fast & Fast, 9 Clinton street, Newark.

Conshohocken, Pa.—The Conshohocken Wax Paper Company has been incorporated under Delaware laws with capital of $100,000, to manufacture waxed and other processed papers. It is purposed to operated a local mill. The incorporators are Laurence C. Class and Howard B. Katsenbach, Bryn Mawr, Pa.; and Chester E. Beecher, Norristown, Pa.

New York, N. Y.—The Paramount Corrugated Box Corporation has been incorporated with a capital of $30,000, to manufacture corugated packages. The incorporators are J. A. M., and F. Goldberg. Herman Mendes, 233 Broadway, New York, represents the company.

New Haven, Conn.—The New England Bag and Paper Company, 27 George street, recently incorporated under state laws, has been organized with a paid-in capital of $20,000, to manufacture paper bags and containers. Hyman Still has been elected president; Munsey Still, secretary; and Abraham Rubin, treasurer.

Financial

Mellenville, N. Y.—The Mellenville Paper Company has filed notice of change of company name to the Mellenville Products Company.

New York, N. Y.—George P. Schinzel & Son, Inc., 520 West 27th street, manufacturer of corrugated paper shipping boxes, etc., has filed a voluntary petition in bankruptcy showing liabilities of $233,389, and assets, $288,565.

Philadelphia, Pa.—The Hygienic Paper Service Company, bankrupt, has filed schedules in bankruptcy showing liabilities of $21,858, and assets of $5,972. John M. Hill, Bulletin Building, is referee in bankruptcy.

New York, N. Y.—The George A. Lehman Paper Company, Inc., 200 Fifth avenue, bankrupt, has filed schedules stating liabilities of $13,119, and assets, $362.

Never too late to Earn

You know that your original equipment for power would have cost less based on the far lighter starting and running loads of Timken-equipped line shafting, highly-friction free.

You know that light-running Timken power transmission would have permitted lighter, less costly belts.

You know that depreciation would have been carried for less all these years, with misalignment, repairs and shutdowns guarded against by greater Timken Bearing capacity, for both radial and thrust loads.

You could go to a Timken-equipped basis right now, and have the whole cost come back in lubrication savings alone.

Have you figured that the endurance factor in Timken design and in Timken-made bearing steel leaves by far the biggest part of all possible savings still to be made? Write for data.

THE TIMKEN ROLLER BEARING CO., *CANTON, OHIO*

Technical information regarding bearing sizes and their mountings can be secured from the Timken Roller Bearing Service & Sales Company's Branches located in the following cities: Atlanta, Baltimore, Boston, Buffalo, Chicago, Cleveland, Dallas, Denver, Detroit, Indianapolis, Kansas City, Los Angeles, Memphis, Milwaukee, Minneapolis, Newark, New York, Omaha, Philadelphia, Pittsburgh, Portland, Richmond, St. Louis, Salt Lake City, San Francisco, Seattle, Toronto, Winnipeg.

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ROLLER BEARINGS

PAPER TRADE JOURNAL
ESTABLISHED 1872

With Which Is Combined

PAPER

The Magazine of the Paper Industry

HENRY J. BERGER, Editor

Member A. B. C. Audit Bureau of Circulations

Vol. LXXXI New York, December 17, 1925 No. 25

MERRY CHRISTMAS

This is the season of felicitations. Pleasant reminders of this fact are the numerous handsome cards that are constantly reaching this office from the many friends of the PAPER TRADE JOURNAL. It would be impossible to express our thanks personally to all those good friends, but the PAPER TRADE JOURNAL does want them to know that all of these expressions of good will are appreciated very much and it takes this means of expressing its thanks.

While the year has not by any means been among the most satisfactory that the paper industry has experienced, it has been far from a bad year and it will undoubtedly average up considerably better than it was expected to during some of the earlier months. So we have much to be thankful for and this ought to help a good deal to make this Christmas a really enjoyable one. That it will be a real merry Christmas for every one in the paper industry and also that the new year will bring an abundance of additional prosperity is the sincere wish of the PAPER TRADE JOURNAL.

PAPER EXPORTS INCREASE

The upward trend noticeable in paper and board exports from the United States during September continued in October, the total value of such shipments during October exceeding those during September by 8 per cent, says the Paper Division of the Department of Commerce, discussing the foreign paper trade of the country during October.

The principal gains occurred in exports of miscellaneous wrapping papers, writing paper, tissue and crepe paper and wall paper. Somewhat smaller increases also occurred in shipments of book paper, boards, boxes and cartons, and blotting, carbon, and cash register papers.

Compared with the corresponding month in 1924, the value of the paper and board shipments during October show a decrease of 6 per cent. This decline in value is partly attributable to a decrease in the volume of shipments of a considerable number of the items and partly to a decrease in the average export value of a number of the more important classes, such as news print, book paper, wrapping papers, tissue and crepe paper, and boxes and cartons.

Exports of paper base stocks from the United States during October were marked by an increase in the exports of rags and a decrease in exports of sulphite and soda wood pulp as compared with the October, 1924, shipments. Exports of wood pulp, other than the two classes mentioned, also exceeded those of the previous month and of the corresponding month in 1924.

Imports of paper and board and paper base stocks into the United States during October increased in value, the former by 8 per cent and the latter by 6 per cent, in comparison with similar imports during the month of September. Receipts of all classes of wood pulp, and of news print, other printing paper, greaseproof and waterproof papers, writing, surface-coated, tissue, hanging and cigarette papers were greater than those during the preceding month, the principal increases, however, being confined to news print paper and mechanical ground wood.

In comparison with October, 1924, the outstanding increase was in imports of news print, which increased 27 per cent in volume and 23 per cent in value, and which now represent approximately 90 per cent of the total value of paper and board imports. Imports of greaseproof paper, writing, photographic, hanging papers and mechanical ground wood were also above those of the corresponding month last year, but outside of these classes smaller receipts of both paper and paper base stocks were registered.

Imports of pulp wood during October were 20 per cent under those of the preceding month, and 14 per cent under those of October, 1924.

BUSINESS DETERIORATION

Commenting on a number of old business concerns that have dried up or liquidated recently, Mr. J. H. Tregoe, executive manager of the National Association of Credit Men, said recently that deterioration in business enterprises results from the violation of economic laws that business men so habitually disregard.

"Every now and then we are surprised by the failure of some concern which has gone along for years with apparent success. There was no apprehension of its deterioration," Mr. Tregoe observed. "The question arises, just when did the deterioration begin? There must have been some period in the life of the enterprise when success became impossible and there was nothing ahead eventually but collapse.

"Deterioration in a business enterprise results just as in the human body, from violation of natural laws. Business is not automatic. It is a human instrument and is subject to human control. The laws of success in business are very simple but difficult to put into execution. All too frequently the difficulty of observing them is overlooked because of their very simplicity.

"Without adequate profits a business cannot survive, and every rule that applies to the making of profits must be obeyed or else deterioration results. A proper turnover of merchandise and receivables constitutes the principal hinge on which profits swing. No matter how reputable a concern may be, if these features are not as they should be, then the basis of success is impaired and there may come deterioration that may cause the whole structure to collapse.

"Credit scrutiny is too often directed upon the new order for goods rather than upon the circumstances which, after all, are the

guarantee of its safety. Close scrutiny alone will reveal whether or not the rules of profit-making are being lived up to, whether there is soundness or deterioration in the business. It is possible in most concerns to prevent entire collapse by discovering and arresting deterioration before it has proceeded to an irreparable stage.

"If we remain alert and develop a skill that can detect when the rosiness of an enterprise is only the hectic flush that is the sign of an unsound constitution, we need not fear deterioration."

Paper Production Increases in October

The October production of paper in the United States, as reported by identical mills to the American Paper and Pulp Association and co-operating organizations, showed an increase of 8 per cent as compared with September's production (following a 0.7 per cent increase in September over August), according to the Association's Monthly Statistical Summary of Pulp and Paper Industry. All grades showed an increase in production as compared with September.

The Summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in co-operation with the Binders Board aMnufacturers Association, Converting Paper Mills Association, Cover Paper Association, Newsprint Service Bureau, Wrapping Paper Manufacturers Service Bureau and Writing Paper Manufacturers' Association.

The figures for October for same mills as reported in September are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month —Net Tons
News print	66	134,991	141,996	20,420
Book	61	89,802	89,302	46,075
Paperboard	102	132,249	133,731	30,810
Wrapping	76	55,006	58,945	47,298
Bag	24	10,773	11,273	6,963
Fine	79	32,988	33,337	39,938
Tissue	46	13,802	14,184	12,111
Hanging	8	4,905	5,059	1,841
Felts	18	19,874	20,211	2,738
Other Grades	65	20,673	20,967	16,328
Total—All Grades		515,063	529,005	224,522

During the same period, domestic wood pulp production increased 23 per cent, this increase being distributed over all grades. The October totals (mills identical with those reporting in September), as reported by the American Paper and Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand End of Month Net Tons
Groundwood Pulp	97	90,393	93,538	4,767	129,932
Sulphite News Grade	37	40,170	37,434	3,061	9,275
Sulphite Bleached	21	22,866	19,279	4,143	2,729
Sulphite Easy Bl.	6	3,888	3,373	502	1,391
Sulphite Mitscherlich	6	7,511	6,482	1,672	840
Sulphate Pulp	9	15,347	13,236	1,999	1,249
Soda Pulp	11	18,515	13,482	5,111	3,613
Other than Wood Pulp	2	106	101	....	63
Total—All Grades		198,796	186,925	21,255	149,092

West Virginia to Build Store Room

BOSTON, Mass., December 14, 1925.—The West Virginia Pulp and Paper Company, New York City, has placed contract with the Morton C. Tuttle Company, 862 Park Square Building, to construct a concrete, structural steel, finishing and store room, approximately 80 x 170, at its Williamsburg, Pa., plant. Plans are private. Construction work will start immediately.

C. H. Norton Co. Organized

NORTH WESTCHESTER, Conn., December 14, 1925.—After January 1, 1926, the paper board business founded in 1886 by C. H. Norton and conducted by him since that date will be carried on by the C. H. Norton Company, a Connecticut corporation. The personnel of the organization will remain unchanged, C. H. Norton becoming the president of the new company.

Report on Binder Board Survey

WASHINGTON, D. C. December 2, 1924.—Surveys recently completed by the Division of Simplified Practice of the Department of Commerce at the request of makers of binder board of the diversity of sizes and thicknesses of that product, have been presented to the Binder Board Association, and steps taken for the development of a Simplified Practice Recommendation, for five sizes.

The Association represents 85 to 90 per cent of the total production of binder board, and although the industry has been in existence more than 100 years, this is the first time a scientific analysis has been made of the production, the needs and the sales.

The figures supplied to the Division, covering 1924, show that the gross turnover of the manufacturers was 1,000,000 bundles, or 25,000 tons. These were produced in 718 different sizes of sheets, varying by as little as ¼th inch, and from 1 to 27 different thickness, making a grand total of 1,928 different items. The survey showed that 945 items of size and thickness were sold in individual lots of less than 100 bundles each, and that all of these amounted to less than 7 per cent of the sales. There were 790 items which were sold in lots of from 100 to 1,000 bundles; and but 193 items which were sold in lots of over 1,000 bundles per annum. In only 17 items did the annual sales represent more than one per cent of the grand total for the year, the aggregate of these being 26 per cent of the annual sales.

When these figures were carefully studied, the manufacturers decided to recommend to the trade that but five sizes be made for stock, but in any thicknesses required. These will replace the 718 sizes now being made. The proposed reduction would be 99.3 per cent. The sizes selected include the following, as shown by their importance:

	Per Cent of 1924 Sales
20 x 30 inch, to include:	
20 x 30	4.04
20½ x 30½	.63
23 x 29, to include:	
22 x 28	4.47
22½ x 28½	.96
23 x 29	.80
26 x 32	7.56
26 x 38	4.34
34 x 44, to include:	
33 x 44	1.00
34 x 44	.44
Total for five classes	19.57

It was also decided by the manufacturers to include in their recommendation a provision that for the entire industry to make a size a "stock" size, the minimum annual consumption shall be 250 tons, in a single order or series of orders aggregating this amount, this volume being considered sufficient to hold down overhead costs and other items of expense to a point which warrants selling such a size as "stock" or carrying it on hand.

Leigh Davey, of Davey Brothers, Jersey City, and O. M. Porter, of New York City, president and secretary, respectively, of the Binder Board Association, are canvassing jobbers and consumers regarding this tentative program. It is planned to ask the Division of Simplified Practice to call a general conference to act on the resulting recommendations in the early spring months.

Lowe Paper Co. Leases Pioneer Mills

WEST MILTON, N. Y., December 15, 1925.—The Lowe Paper Company, whose general offices are at Ridgefield, N. J., has leased for a period of three years the Pioneer Mills at West Milton and will start the plant at an early date, manufacturing high grade tissue. The mill will be managed by E. S. Baker in conjunction with the Empire mill of the company at Rock City Falls.

Soda Ash **Bicarbonate of Soda** **Caustic Soda**
Modified Soda **Special Alkali**

QUALITY

The additional value in Diamond Alkalies that maintains them as the Standard.

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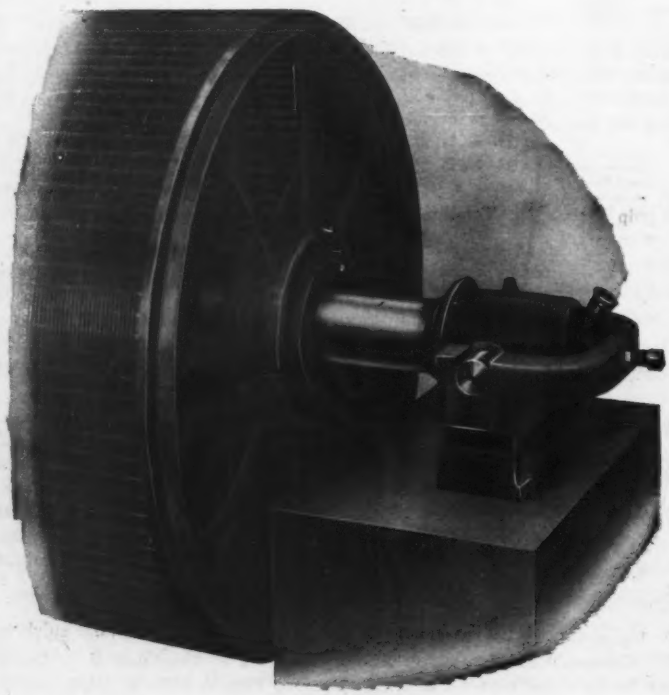

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Section of the

Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G.MacNAUGHTON, Secretary

Waste in the Industry and Stream Pollution

By G. K. Spence, President of the Technical Association

These two phases of the problem go hand in hand. When we stop the waste, we eliminate stream pollution.

The general use of the automobile has resulted in a large number of people seeking recreation in the woods and along the streams, so that where it exists complaints against stream pollution are beginning to multiply. Fortunately this turn of affairs has not caught the pulp and paper manufacturer napping. In fact, he has been just a little ahead of the times. For a number of years this industry has been spending hundreds of thousands of dollars on research work and installations to convert waste materials into valuable by-products, and at the same time eliminating stream pollution.

Through the Waste Committee of the Technical Association of the Pulp and Paper Indutry, the enormous yearly loss has been more emphatically brought to the attention of the manufacturer and more constructive work done toward utilizing these materials. Mills which were losing from 10 to 12 per cent of the fiber used in manufacturing the sheet of paper have reduced this loss to as low as 2 per cent, and these same mills have reduced the loss of clay in the white water from 50 to 15 per cent and less.

In the paper mill where much clay is used in the sheet, the most efficient form of saveall is the sedimentation type; but when handling waste water from sulphite, sulphate or soda pulp mills, some form of filter will give better results. The intermittent type, while it requires a little more attention, is more efficient, due to the fact that the fibers which build up on the surface of the filter act as a filtering medium, and ehe removal of suspended materials is almost 100 per cent perfect.

Until within recent years it had been customary for soda and sulphate pulp manufacturers to wash the lime sludge from the causticizing pans either directly into the streams or to large sedimentation basins. Today many of the mills are reburning the lime sludge and using it over again, as it has been proven in most cases practical to reclaim this sludge.

Carbon in Black Ash

Some of the black ash residue, the wood carbon, from the leaching department of soda pulp mills, has been activated or prepared in other ways and sold under various trade names for filtering and decolorizing purposes. Some of this residue has been delivered to black works, prepared and used as an adulterant for lampblack, etc., and some has been used for case hardening steel. Experiments have been conducted with this material for various other uses; but the outlet has been so small that only a limited quantity can be disposed of.

A furnace has recently been designed and experiments are at present being conducted in order to determine the practicability of completely burning the black ash and utilizing its heat value, when recovering the soda. This no doubt will be the future means of disposal of the greater bulk of this waste material.

Sawdust from the chippers which at one time entered the streams, is now being consumed in rotary incinerators, dutch ovens, etc., and its heat value utilized.

Waste Water from Soda and Sulphate Mills

Waste liquor from the wash pans and evaporators of soda and sulphate pulp mills, if allowed to enter the stream, will have a tendency to color the water and produce a foamy appearance on its surface; but has no injurious effect. Every effort is being made by the manufacturers to reduce this waste to a minimum. When the pan capacity is sufficient to admit of using the locked up system of washing, and the spent liquor properly filtered before passing to the evaporators, the discharge of this waste material into the stream is greatly reduced. After considerable experimenting the writer has found that the most efficient filtering results have been obtained with the use of a Vallez rotary filter. This is a batch type, but requires very little attention. The liquor passing into this filter during experimental runs contained from 900 to 1,200 pounds of suspended fiber in twenty-four hours, while that leaving the filter was entirely free from fiber. Before installing this filter it was necessary to turn water into the evaporators once every eight hours, but since this installation almost two years ago, no water has been used and the efficiency of the evaporator increased about 15 per cent.

When operating film type evaporators such as the Scott and Yaryan it is essential to remove the entrained stock from the liquor for efficient operating results, and at the same time enough stock can be saved to more than pay for the filter installation. Such a filter installation also furnishes a very efficient check on the condition of the wash pan bottoms.

Sulphite Waste Liquor

More research work has been conducted and more real money spent by pulp manufacturers investigating methods for disposal of waste sulphite liquor, than on any other waste material from the mills.

Ethyl alcohol has been manufactured from waste sulphite liquor after fermentation. Some of this liquor has been evaporated and, after various treatments, used for road binder, core binder, tanning extract, etc.; but the market for disposal of such materials has been very limited. Sulphite waste liquor has been concentrated and used for briquetting coal dust, and experiments have been con-

ducted on burning the concentrated liquor direct through spray nozzles. It is the general impression that the final means of disposal of the greater quantity of this waste liquor will be by burning it in some manner with the hope that the fuel value obtained will at least pay for the expense of preparing and handling it.

The general public is beginning to realize that pulp and paper manufacturers are making every possible effort to eliminate stream pollution.

In Ohio and Pennsylvania the health departments and the pulp and paper manufacturers are co-operating in this work by forming a permanent organization for the interchange of ideas relative to developing methods for the elimination of stream pollution.

This spirit of co-operation, rather than antagonism, will more readily accomplish the desired results and work no hardships on the parties concerned, as it will then be generally understood that everything is being done that possibly can be done, consistent with operating conditions.

Canadian Paper Exports Increase

Exports of pulp and paper from Canada in October were valued at $13,943,763, according to the report issued by the Canadian Pulp and Paper Association. This was an increase of $257,757 over the previous month and of $2,294,977 over the total for October, 1924.

Woodpulp exports in October were valued at $4,526,474 as compared with $3,696,406 in October, 1924, while exports of paper amounted to $9,417,289 compared with $7,952,380 in the corresponding month last year.

For the first ten months of the current year, exports of pulp and paper were valued at $125,463,628 which is an appreciable increase over the total of $114,699,119 for the first ten months of 1924. In this period the exports of wood pulp increased from $32,476,443 in 1924 to $38,708,391 in 1925, while paper exports rose from $82,222,676 to $86,755,237.

Considerable gains were made this year in the exports of wood pulp, particularly in mechanical and sulphite pulps.

Information as to Filler and Coating Clay

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 6, 1925.—The American Pulp and Paper Association, according to reports received here, has recently sent to its membership two composite reports regarding the China Clay situation from two different angles. It is said that these reports contain the best information that has ever been gotten together on the use of clay in the paper indusry. The reports follow:

SUMMARY OF RETURNS ON 76 QUESTIONNAIRES

(COMPANIES DIVIDED ACCORDING TO GRADE OF PAPER MADE)	33 Cos. Making principally Book Paper	6 Cos. Making principally News & Hang.	17 Cos. Making principally Board & Wrap.	5 Cos. Making principally Fine Paper	15 Cos. Making principally Gl. & Fancy & Spec.	76 Companies Total
1. Do you use filler clay?	Yes 32	6	6	5	3	52
a: Imported (English)?	26	1	6	1	2	36
b: Domestic?	13	5	3	4	1	26
Where produced?	Ga., S. C.	Vt., Ga., S. C.	Ga., Va.	Va., S. C., Vt., Mich.	Kans.	
2. Do you use coating clay?	Yes 16	1	13	—	13	43
a: Imported (English)?	16	1	12	—	12	41
b: Domestic?	1	1	5	—	4	11
Where produced?		Ga.	S. C., N. C.	—	S. C.	
3. Total year: usage? Tons	272,676	2,950	45,780	6,600	2,118	330,124
a: Imported?	179,493 66%	450 15%	24,403 53%	3,200 48%	1,821 86%	209,367 63%
b: Domestic?	93,183 34%	2,500 85%	21,377 47%	3,400 52%	297 14%	120,757 37%
4. Imported price?	Higher 22	2	11	1	9	45
Compared with Domestic?	$.26 to $20	$5.00	$2.60 to $7	25%	$2 to $7	Ave. $5.78
	Lower 5	—	1	—	—	6
	Same 2	—	—	—	—	2
Is Quality better?	Yes 23	6	15	4	12	60
5. Domestic preferred a/c advantage in price?	Yes 8	2	4	3	3	20
6. Imported preferred a/c better in quality?	Yes 26	2	16	2	12	58
7. How do domestic and imported compare in						
a: Color?	Imp. better 26	3	15	2	14	60
	same 3	—	1	1	—	5
b: Grit?	Imp. less 23	2	13	1	9	48
	same 5	—	2	1	2	10
c: Retention?	Imp. greater 11	2	3	1	1	18
	same 11	—	5	1	7	24
d: Otherwise?	Imp. cleaner, more plastic, better finish		better formation cleaner	more uniform, different formation	better slip, cleaner, higher finish	
8. How is finished paper affected by filler clay—						
a: Color?	Improved 17	3	2	3	1	26
b: Finish?	Improved 22	3	3	4	—	32
c: Strength?	Reduced 12	1	2	3	—	18
	Same 4	—	—	—	—	4
9. Most necessary elements in filler clays?	Color, retention, fineness, lack of grit, uniformity, colloidal nature, texture, proper combination of silica and alumina, cleanliness, suspension.					
10. Most necessary elements in coating clays?	Same as for filler clays, also plasticity and spreading qualities.					
11. Could domestic clay be improved so as to bring it up to proper standard for your purpose?	No 28	3	10	3	10	52
	Yes 1	—	1	1	1	4
	? 1	2	3	—	—	6
12. Would you use domestic clay costing same as imported, quality considered, provided imported was available?	No 19	2	3	1	3	28
	Yes 10	1	—	2	—	13
13. Against or in favor of increased duty on import clay?	Against 28	4	17	3	14	66
	In favor 1	1	—	1	—	3
14. Kind of Paper manufactured?	Book	News & Hang.	Board & Wrap.	Fine	Glazed & Fancy & Spec.	
15. Remarks?	Could not substitute domestic clay. Competition comes only in filler grades. Can't use domestic at any price for high grade work. No competition on higher quality and tariff should be reduced. Duty already too high, Higher duty would increase cost to consumer.	Don't think protection is needed.	Imported does not fill up cylinder wires. Could not substitute domestic.	Can't compete in foreign market without foreign clay.	Domestic could not be substituted. Would work hardship if duty is increased. Have to lower standard to use domestic.	

SUMMARY OF RETURNS ON 76 QUESTIONNAIRES

(COMPANIES DIVIDED ACCORDING TO AMOUNT USED ANNUALLY)	6 Cos. Using 20,000 tons and over annually	5 Cos. Using 10,000 to 20,000 tons annually	5 Cos. Using 5,000 to 10,000 tons annually	7 Cos. Using 2,500 to 5,000 tons annually	53 Cos. Using less than 2,500 tons annually	76 Companies Total
1. Do you use filler clay?	Yes 6	5	4	7	30	52
a: Imported (English)?	5	5	4	6	16	36
b: Domestic?	3	4	0	3	16	26
Where produced?	Ga., S. C.	Ga., Va.	—	Ga., S. C., Vt., Kan., Mich.	Vt., Ga., S. C.	
2. Do you use coating clay?	Yes 4	4	3	2	30	43
a: Imported (English)?	4	4	3	2	28	41
b: Domestic?	—	—	—	—	11	11
Where produced?	Ga., S. C.	—	—	—	S. C., N. C., Ga.	
3. Total yearly usage?	170,950	65,505	31,576	26,150	35,943	330,124
a: Imported?	101,450 60%	36,012 55%	31,576 100%	14,450 55%	25,879 72%	209,367 63%
b: Domestic?	69,500 40%	29,493 45%	—	11,700 45%	10,064 28%	120,757 37%
4. Imported price?	Higher 3	3	4	5	30	45
Compared with Domestic?	$.26 to $8.	$6 to $10	$1.50 to $20	$.70 to $10	$1.50 to $20	Ave. $5.78
	Lower 2	—	—	—	4	6
	Same —	1	—	—	1	2
Is Quality better?	Yes 5	5	4	5	41	60
5. Domestic preferred a/c advantage in price?	Yes 2	2	—	2	14	20
6. Imported preferred a/c better in quality?	Yes 4	3	5	5	41	58
7. How do domestic and imported compare in						
a: Color?	Imp. better 5	4	5	4	42	60
	same —	1	—	1	3	5
b: Grit?	Imp. less 2	2	4	4	36	48
	same 2	2	—	1	5	10
c: Retention?	Imp. greater 1	—	4	2	11	18
	same 3	4	—	2	15	24
d: Otherwise?	Imp. mixes easier, better finish	—	finish higher	cleaner, more plastic	cleaner, more plastic, etc.	
8. How is finished paper affected by filler clay—						
a: Color?	Improved 4	3	2	4	13	26
b: Finish?	Improved 6	4	2	6	14	32
c: Strength?	Reduced 4	1	2	4	7	18
	Same —	2	—	1	1	4
9. Most necessary elements in filler clays?	Color, retention, fineness, lack of grit, uniformity, colloidal nature, texture, proper combination of silica and alumina, cleanliness, suspension.					
10. Most necessary elements in coating clays?	Same as for filler clays, also plasticity and spreading qualities.					
11. Could domestic clay be improved so as to bring it up to proper standard for your purpose?	No 5	4	5	5	33	52
	Yes —	—	—	—	4	4
	? —	—	—	—	6	6
12. Would you use domestic clay costing same as imported, quality considered, provided imported was available?	No 3	—	4	4	17	28
	Yes 1	3	1	2	6	13
13. Against or in favor of increased duty on import clay?	Against 5	4	5	5	47	66
	In favor —	—	—	1	2	3
14. Kind of Paper manufactured?	Book, Wrapping	Book	Book	Book & Fine	Board, Wrapping, fine, Gl. Fcy., News, etc.	
15. Remarks?	Can't use domestic for higher grades.	Competition comes only in "filler" grades. Will only increase cost to consumer if duty is increased.	Can't use domestic at any price. No competition on higher quality and duty should be reduced.	Duty already too high. Foreign and domestic clay for altogether different use. Papers can't compete in foreign market without foreign clay.	English clay does not fill up cylinder wires on board machines. Could not substitute domestic clay for high grade work. American producers are already well protected. The two days are not competitive but for different grades of work.	

Utilization of Wase Liquors

Die Verwertung der Zellstoff-Ablaugen. Patentliteratur 1912-1924. Dr. A. Schrohe. Schriften des Vereins der Zellstoff und Papier-Chemiker und Ingenieure, No 16. Berlin, Otto Elsner, 1925. 140 p. Price 2 gold marks.

This work, which is in part a reprint of the material appearing in *Der Papierfabrikant* 23:30-33, 63-65, 89-92, 158-161, 251-253, 284-287, 293-296, 306-307 (1925) consists of two parts:

(1) A list of patents classified according to subject matter; the following subject headings are used: Alcohol (Sulphite spirits) and fermentation; finishing agents; utilization and regeneration of sulphite waste liquor, and black liquors; binding agents and briquetting materials; fuels, carbon and graphite; distillation, dry and by means of superheated steam; fertilizers, food stuffs, tanning materials and tanning methods, adhesives, etc.; lignin; sulphur and hydrogen sulphide; sulphurous acid and sulphites; evaporation, concentration and distillation; heat recovery; miscellaneous.

The patents are annotated and are arranged with German patents first, followed by the foreign patents.

(2) A chronological arrangement of these patents, the second part duplicating the first as far as the actual patents are concerned, the only difference being the method of arrangement. The work concludes with a patent, subject and author index.

It does not appear to the reviewer that any particular object is gained by duplicating the subject matter of the book, by simply varying the arrangement. One arrangement with the indexes would have served all purposes. This would decrease the size of the work by some 60 pages. This does not, however, detract from the value of the work, since the utilization of waste liquors is one of the very important problems facing the paper industry today.

A translation of this work is appearing in THE PAPER TRADE JOURNAL, and as indicated there, many additional patents dealing with the subject have been found by a search of the literature. A reprint of the translation will appear in the forthcoming volume of Association Technical Papers; this will be supplemented by an author, subject and patent index.

C. J. WEST.

To Test Eucalyptus for Pulp Purposes

[FROM OUR REGULAR CORRESPONDENT]

MADISON, Wis., December 7, 1925.—Dr. Navarro de Andrade, chief forester for the State of San Paulo, Brazil, is at the Forest Products Laboratory to observe pulping trials of a quantity of South American eucalyptus which he has shipped from Brazil for the purpose. Considerable eucalyptus is grown in Brazil in plantations. The trees reach tie size in about fifteen years. It is not certain that eucalyptus will produce paper other than that of "book" grade, although even Brazilian made book paper, because of a tariff on news print, may undersell imported paper of news grade on Brazilian markets. All of the common chemical processes will be tried in pulping the eucalyptus furnished by Dr. Navarro, as well as the newer chemical processes developed by the Forest Products Laboratory and the mechanical (news print) process.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

Power, Fuels, Etc.

Preheating Air for Combustion Purposes in the Pulp and Paper Industry. E. Belani. Papierfabr. 23, 50-53 (Jan. 25); 66-70 (Feb. 1, 1925). The advantages of the patented Ljungstrom air preheater for combustion purposes are discussed, with especial reference to the pulp and paper industry. Examples are given and the apparatus is described in detail.—J. L. P.

High Pressure Steam in the Pulp Industry. Chr. Eberle. Papierfabr. 23, 225-229 (Apr. 5, 1925); Wochel, Papierfabr. 56, 385-390 (Mar. 28). The properties and the use of high pressure steam in the pulp mill are discussed in a comprehensive manner. —J. L. P.

Electric Flue Gas Tester. Anon. Papierfabr. 23, 21-23 (Jan. 11, 1925). Descriptive.—J. L. P.

Exhaust Steam Pressure-Regulator. Anon. Zellstoff U. Papier. 5, 15-16 (Jan. 1925). A pressure regulator for exhaust steam is described and pictured.—J. L. P.

Heat Economy in the Pulp Industry. H. Frankenbach. Wochbl. Papierfabr. 56 130-131 (Jan. 31, 1925). Polemical against Dieckmann (this journal No. 40, 1924) and Moerbeek (this journal No. 46, 1924).—J. L. P.

Power and Heat Economy. von Lassberg. Papierfabr. 23, 248-250 (Apr. 12, 1925). A report of the committee on power and heat economy of the German Society of Pulp and Paper Chemists and Engineers, Mar. 4-5.—J. L. P.

Heat Losses in the Paper Industry and Their Reduction. Anon. Wochbl. Papierfabr. 56, 220-223 (Feb. 21, 1925). Boiler and power losses are considered in this first article.—J. L. P.

Developments in Mechanical Transmission with Reference to Paper Manufacture. H. Landor. Wochbl. Papierfabr. 56, 268-271 (Feb. 28, 1925). Recent developments in the transmission of power in paper manufacture.—J. L. P.

Lubrication and the Paper Industry. E. Belani. Wochbl. Papierfabr. 56, 223-225 (Feb. 21, 1925). A brief article on lubrication in the paper industry, oil testing with a description of the Richard's universal oil tester, and pointers on oil economy. —J. L. P.

Use of Waste Heat for Heating Buildings. "Calor." Papeterie 47, 50-54 (Jan. 25, 1925); 154-158 (Feb. 25, 1925); 206-209 (Mar. 10, 1925); 258-261 Mar. 25, 1925). Discussion of the most suitable methods of utilizing exhaust steam for heating buildings.—A. P.-C.

Improving Efficiency and Reliability of Machinery in Paper and Board Mills. R. Seitre. Papier 28, 311-314 (Mar. 1925).) Brief discussion of the proper lubrication of the different machines used in pulp, paper and board mills.—A. P.-C.

Test of CO_2 Recorders. J. F. Barkley. Pulp & Paper 23, 367 (Apr. 2, 1925). In general, the CO_2 recorders on the market give accurate results when all elements are favorable, but there are many little things that can happen to disturb their accuracy. The instruments require to be well cared for and frequently checked by means of an Orsat to ensure of their being in proper working order.—A. P.-C.

Method of and Apparatus for Testing Gases. O. Dommer. U. S. pat. 1,506,617, Aug. 26, 1924. In testing flue gases or other gas mixtures without employment of absorption liquids, the gas is caused to flow through a conduit "comprising in succession a portion responding to differences of the viscosity of the gas" such as a capillary tube, and a portion "responding to differences in the specific gravity of the gas" such as a nozzle, and differences in pressure the two are taken as an index of the relative composition of the gas.—A. P.-C.

Electrically Heated Boiler. P. Bergeon. U. S. pat. 1,504,928, Aug. 12, 1924. The boiler consists of a horizontal sheet steel shell into which the electrodes enter through specially designed fused silica insulators which make a steam tight connection. Each electrode is in an evaporation chamber consisting essentially of a vertical dome extending down into the body of the boiler some distance below the electrode. The steam is drawn off from each chamber into a common line which goes back into the main steam space of the boiler, from which it is drawn off in the usual manner through a separator. The pipe connecting the evaporation chambers with the main steam space of the boiler is fitted with a valve by means of which the production of steam is regulated. If the valve is closed slightly, the pressure in the evaporation chambers is raised slightly and consequently the water level in the chambers is lowered. The degree of immersion is thereby decreased, and also the production of steam. If the valve is shut off completely the water is driven completely out of the chambers, and as the electrodes no longer plunge in the water generation of steam is stopped.—A. P.-C.

Water

Influence of Water on the Paper Fiber in the Manufacturing Processes. S. Smith. Papierfabr. 23, 41-42 (Jan. 25, 1925). Water acts on paper fibers not only to effect a swelling but also to soften them. Unbeaten fibers, which are not swollen, are stiff and somewhat elastic in their properties; beaten and swollen fibers are soft and plastic, but if the water is pressed out of them they become more like the unbeaten ones in their behavior. Volume measurements on samples of unbeaten and general hygienic conditions of a paper mill.—J. L. P.

Letters of a Paper Maker to His Son. Anon. Wochbl. Papierfabr. 56, 37-39 (Jan. 10); 101-103 (Jan. 24); 155-159 (Feb. 7, 1925). The concluding series of these letters are concerned with the water supply, water recovery and its purification, and the general hygienic conditions of a paper mill.—J. L. P.

Spring Water: Its Value in the Paper Mill and Its Location. E. Belani. Papierfabr. 23, 153-158 (Mar. 8, 1925). A general article, illustrated, on the use and advantages of spring water in the paper industry. The location and drilling of springs are described.—J. L. P.

Process for the Purification of Water. Permutite Ak.-Ges. Ger. pat. 405,172; addition to 318,145. Papierfabr. 23, (Jan. 4, 1925). A mixed metal salt and an alkali silicate are precipitated together in the formation of a water purifier.—J. L. P.

Water Filter and Stock Reclaimer. Anon. Zellstoff U. Papier 5, 134 (Apr. 1925). The V. Antoine water filter and stock reclaimer is described.—J. L. P.

Water in the Paper Industry. M. Verdier. Papier 28, 1193-1197 (Feb. 1925). Brief description of the determination of the hardness of water and of various water softening processes. —A. P.-C.

White Water Utilization. V. P. Edwards. Paper Mill 49, No. 13, 4, 8, 10, (Mar. 28, 1925). A discussion of its necessity from the double standpoint of stream pollution prevention and of economy.—A. P.-C.

White Water Purification in Kalamazoo Valley. W. F. Goldsmith. Paper Ind. 6,2150-2151 (Mar. 1925). Brief description of the save-all equipment of the various mills in the Kalamazoo

Valley and of the joint investigation carried out by them with a view to treating their mill effluents so as not to conflict with the state laws against stream pollution.—A. P.-C.

How to Measure White Water Losses. V. P. Edwards. Paper Trade J. 80, No. 18, 46-49 (Apr. 30, 1925); Paper Ind. 7, 215-220 (May, 1925). A discussion of the various methods of measuring white water discharged from the mill: weir, current meters, pitot tubes, floats, travelling screen, color method, meters, chemical gaging, recording devices. Methods of sampling and of determining the amounts of fiber and filler are also described.—A. P.-C.

White Water Problem from the German Viewpoint. A. Jantata. Paper Trade J. 80, No. 19, 51-54 (May 7, 1925). A general discussion of white water treatment and of the different types of savealls.—A. P.-C.

Testing

Determination of the Relative Strength of Pulps by the Lampen Ball Mill. H. Schwalbe. Papierfabr. 23, 234-241 (Apr. 5, 1925). The various methods of determining strength tests of large ball, and only presses and rolls the fibers; it does not cut pulps are critically reviewed. The Lampen ball mill contains one, them. Comparative tests on 50 g. samples are made with this ball mill and the procedure of Bergmann. The drying of paper for testing purposes is preferably carried out in a weak vacuum at 75°, according to Bermann. The Lampen mill gives exact and characteristic values, even for pulps similar in properties, and gives good results in practice. Photographs of the apparatus are shown. A bibliography of 21 references on the subject is appended.—J. L. P.

Pulp Testing With the Lampen Ball Mill. R. Sieber, Papierfabr. 23, 245 (Apr. 12, 1925). Whether bronze or steel should be used in the construction of the Lampen ball mill has not been determined. A longer time of beating is required to produce a similar stock with the Lampen mill as compared with the Jarr mill. In the latter mill, which is made of porcelain, abrasion leads to the formation of fine particles which play the role of a filler, and, instead of one, several balls are used. The Lampen ball mill gives good comparative results and represents an advance over the porcelain Jarr mill.—J. L. P.

Experimental Results on the Determination of Resin and Fat in Pulps. H. Schwalbe. Papierfabr. 23, 246-247 (Apr. 12, 1925). The usual extraction methods employed for determining resin and fat in pulps do not effect a thorough penetration of the fibers. The apparatus of Wislicenus [Zellstoff Chem. Abhandlungen 1, 70 (1920)] gives higher values than the ordinary Soxhlet apparatus. A new method, employing a pressure container constructed of phosphor-bronze or of steel and tinned on the inside, is described. A soft lead gasket was used between the cover and container. The container with solvent and fibers, is placed in a shaking machine and agitated. An electrical heating device is arranged. After an agitation of 2 hr., the container is cooled, the solvent filtered (a pet cock in the cover of apparatus facilitates its removal), and fresh solvent added. This process is repeated twice. The extract is distilled in the usual way. After 6 hr. practically all the resin and fat are removed. Comparative tests with the Wislicenus method gave slightly higher values for the pressure method. Drying of the extract at 80 to 85° is preferable to 100 to 105°, thus diminishing the tendency of decomposition. Less foreign substances are removed by the proposed method.—J. L. P.

Electrical Sizing Tester. Korn. Papierfabr. 23, 26-27 (Jan. 18); Wochbl. Papierfabr. 56, 63-64 (Jan. 17); Zellstoff U. Papier 5, 9-11 (Jan. 1925). A description of the electrical sizing tester described by N. A. Stephens in Paper, No. 25, p. 1142 (1924).—J. L. P.

Investigations on the Folding Endurance. P. M. H. Jacobsen. Papierfabr. 23, 7-9, 178 (Jan. 4 and Mar. 15, 1925). A highly mathematical discussion of the results of an investigation of the folding endurance by means of the Schopper apparatus. Two variables are considered; (1) uniform tension and different strip widths, and (2) variable tension with constant strip width. —J. L. P.

Testing of Parchment Paper. F. Huth. Papierfabr. 23, 73-74 (Feb. 8, 1925). Parchmentizing processes are briefly described and the methods for testing true and vegetable parchment are summarized.—J. L. P.

Apparatus for Determining the Moisture, Stretch, and Shrinkage in Paper. Fenchel. Zellstoff U. Papier 5, 20 (Jan. 1925). The Schopper instrument for determining moisture, stretch and shrinkage in paper is pictured and described. The moisture test may be determined in 10 min. to 0.01 per cent.—J. L. P.

Testing Paper for Permeability to Liquids. A Discussion of Some New Methods and Procedures Developed at the Bureau of Standards. F. T. Carson. Paper Trade J. 80, No. 10, 59-62 (Mar. 5, 1925). Some of the necessary considerations in testing the permeability of paper are pointed out in a discussion of different kinds of paper and their relation to liquids and solutions of various characters. A new sizing test is described, consisting essentially in observing the time taken by water to transude through the paper, a mixture of powdered sugar and one or more dyes being used as indicator. The application of the ground glass method (Paper Trade J. 79, No. 10, 48-50, Sept. 4, 1924) of determining water resistance to the testing of boards is described in detail, including a discussion of the effect of temperature on the sensitivity of the ground glass surface. A modification of the pipette test for bibulous paper is outlined, in which small amounts of water are delivered from a Mohr pipette by allowing the tip to remain in the water until completely delivered. A new method is described for testing greaseproof paper, in which the test specimen is sealed to a glass cylinder with syrup or glue, placed in oil or other organic testing medium, and viewed from above by transmitted light. The transuded liquid appears in spots, alternately light and dark, as a mirror oscillates underneath.—A. P.-C.

Instrument for Measuring and Indicating the Moisture Content of Paper on the Paper Machine. A. R. Harvey. Fr. pat. 586, 824. The paper is passed around two rolls, the first of which is not heated while the second contains a suitable heating element. The difference in temperature between the two rolls is measured by means of a thermo-couple the respective ends of which are in contact with the inner surfaces of the two rolls. The temperature of the first roll is practically constant, while the temperature of the second will depend on the amount of heat carried away by the paper, which in turn depends on the moisture content of the sheet. The milli-voltmeter used to measure the difference in temperature between the rolls may be graduated to read the percentage of moisture directly.—A. P.-C.

Relation of Paper Tests to Paper Furnish. J. E. Minor. Paper Trade J. 80, No. 13, 47-50 (March 26, 1925). A discussion of tabulated results of tests by the U. S. Government Printing Bureau on bond papers representing standard grades of various mills, from which the author concludes: The bursting, folding and tearing tests each give information as to a different factor of wear in paper. The Mullen test increases regularly with the rag content. Presence of starch with the glue size increases the ciently small to make it a test of value. Presence of starch in glue-sized papers increases the pop test by about 2 points. The tensile test increases with rag content, but individual fluctuations are too large to make the test of any value as a criterion of paper quality. With less than 70 per cent rags, the folding test closely parallels the Mullen; but with 70 to 100 per cent rags there is a much greater increase in the folding test which makes it a better criterion of increased wear and enhancement of value due to high rag content. Presenec of starch with the glue size increases the folding test with rag contents less than 85 per cent, and decreases it with higher rag contents. Tearing resistance increases regu-

larly with rag content, and individual variations are not disturbingly large. Tear in the cross direction always requires more stress than in the machine direction. Starch in glue sized papers increases tearing resistance with rag contents below 50 per cent and decreases it with higher rag contents.—A. P.-C.

More Notes on Paper Testing. James Strachan. World's Paper Tr. Rev. 83, 522, 524 (Feb. 13, 1925). A discussion of the factors and circumstances to be considered in paper testing, more particularly in analyzing a sample for duplication.—A. P.-C.

Tearing Test of Paper As Affected by Humidity. E. Sutermeister. Paper Ind. 7, 231-233 (May 1925). Tests on a number of book papers showed that the tearing strength increases quite uniformly as the atmospheric humidity rises, the increases in strength being nearly the same in both machine and cross directions.—A. P.-C.

Miscellaneous

Activities in the Paper and Wood Pulp Industries. G. F. Maughmer. Paper Trade J. 80, No. 12, 49-52 (Mar. 19 1925). A general discussion of electrical equipment used in pulp and paper mills.—A. P.-C.

Ventilation of the Paper Mill. A. E. Montgomery. Paper Mill 49, No. 10, 4, 48 (Mar. 7, 1925); No. 11, 10, 44 (Mar. 14, 1925). A discussion bringing out the requirements for good ventilation and showing in what ways each of them may be provided for most efficiently and economically.—A. P.-C.

Abstracts of the Pulp and Paper Literature. E. Graap and W. Grunewald. Zellstoff U. Papier 4, 19-22, 25-26 (Feb. 1924). Brief abstracts of articles and patents relating to the pulp and paper industry for the most part from German journals. The period covered is Oct. to Dec. 1923.—J. L. P.

Paper-Glazing Machine. L. M. Lacoste. Fr. pat. 584,126. The paper is passed over a large, smooth, hard roll, against which are lightly pressed a number of small rolls covered with a very hard woolen felt which has been impregnated with the following mixture: 45 parts of casein dissolved in water and ammonia, or of gelatin dissolved in hot water, 27 parts of stearin saponified by boiling with 180 parts of water and 5 to 6 parts of soda ash, and about 10 parts of shellac dissolved in ammonia. After impregnation, the rolls are dried, pressed between iron plates, and turned perfectly true. These rolls are driven at a higher peripheral speed than the large roll, but not more than twice as fast. —A. P.-C.

Calender Rolls. W. H. Yates. Eng. pat. 226,627. Means are provided for removing any film or moisture formed on the inner surface of the roll at the area of contact of the paper; and this area of contact may be further heated after all the moisture film has been removed.—A. P.-C.

Abstracts of the Pulp and Paper Literature, Chemical Part. E. Graap. Zellstoff. U. Papier 5, 61-65 (Feb. 1925). Brief abstracts of articles and patents relating to the pulp and paper industry for the most part from German journals. The period covered is Oct. to Dec. 1924.—J. L. P.

Abstracts of the Pulp and Paper Literature, Mechanical Part. E. Graap. Zellstoff U. Papier 5, 98-101 (Mar. 1925). Brief abstracts of articles in German journals on the pulp and paper industry. The period covered is Oct. to Dec. 1924.—J. L. P.

Bees, Steers and Lilies. F. von Hossle. Wochbl. Papierfabr. 56, 123-128 (Jan. 31, 1925). A discussion of old watermarks formerly used in Germany.—J. L. P.

Bibliography of Paper Making for 1924. C. J. West and A. Papineau-Couture. Paper Trade J. 80, No. 7 51-54; No. 8, 53-56; No. 9, 51-54; No. 10, 63-66; No. 11, 59-62; No. 12, 55-58; No. 13, 51-54; No. 15, 55-58; No. 16, 54-57 (Feb. 12 to Apr. 16, 1925). —A. P.-C.

The Paper Industry in the United States, 1860-1870. F. G. Crawford. Paper Ind. 7, 53-58 (Apr. 1925); 223-228 (May 1925). —A. P.-C.

Curling of Fine Papers. H. H. Hanson. Paper Mill 49, No. 17, 10, 12, 37 (Apr. 25, 1925); Paper Trade J. 80, No. 18, 43-45 (Apr. 30, 1925). A discussion of the mechanism causes, and prevention of curl.—A. P.-C.

History of the Papermakers' Art. E. Belani. Papierfabr. 23, 193-194 (Mar. 22, 1925). Historical.—J. L. P.

Problem of Factory Reorganization. Janata. Papierfabr. 23, 105-108 (Feb. 22, 1925). The reorganization of pulp and paper mills is discussed briefly.—J. L. P.

Report of the Annual Meeting of the German Society of Pulp and Paper Chemists and Engineers. Anon. Papierfabr. 23, 169, 174 (Mar. 15, 1925); 185-188 (Mar. 22); Zellstoff U. Papier 4, 150-152 (Apr.); Wochbl. Papierfabr. 56, 320-322 (Mar. 14); 355-357 (Mar. 21). A report of the business proceedings and abstracts of the papers presented at the annual meeting of the German Society of Pulp and Paper Chemists and Engineers, Mar. 4-5.—J. L. P.

Brightening of Yellowed Printing. W. Herzberg. Papierfabr. 23, 25-26 (Jan. 18, 1925. Printed sheets which have yellowed with age moy be brightened and made legible by first washing the sheets with cold and hot water, and then exposing them to bright light for several weeks. The exposure was made in a window facing the south, and the sheets were moistened from time to time with water to facilitate the treatment. The yellowish and brown spots on the paper entirely disappeared.—J. L. P.

Obtaining Ethereal Oils (Vanillin) by the Steaming or Cooking of Woods. E. Belani. Papierfabr. 23, 29 (Jan. 18, 1925). The ethereal oils, such as vanillin, resins, turpentine, coniferin, etc., are lost in the usual processes of steaming or cooking wood. The Biffar patent (Ger. pat. 400,857) for the recovery of these oils is described. The application of the technique of Williams absorption by means of colloidal silicic acid, should prove to better advantage in this field than the method of Biffar. The author finds that silicic acid does work under certain conditions.— J. L. P.

Paper Investigation by Chemistry Bureau

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., December 14, 1925.—The study of the physical properties of paper used for wrapping fruits and vegetables was continued during the past year, says C. A. Browne, chief of the Bureau of Chemistry in his annual report to the Secretary of Agriculture. All of the samples collected in Florida have been tested. Discussing the paper investigations for the past year the report continues:

The data on them, together with the results oftest previously made on many samples collected in various parts of the country have been compiled. It is now possible to state definitely what physical properties papers for this purpose should possess in order to withstand service conditions. The results of this investigation, soon to be published, will aid packers and shippers to specify paper that will answer every purpose of a satisfactory fruit wrapping paper and to purchase such paper at the lowest practical cost.

Undeveloped coated brown-print paper, used extensively in engineering and construction work for preparing negatives from original drawings on tracing cloth, deteriorates in strength very rapidly when stored under ordinary conditions. An investigation to determine to what extent the deteriorating effect on the paper of the commonly employed brown-print sensitizing materials is affected by temperature, and to determine under what temperature conditions the undeveloped coated paper may be preserved longest was completed. The results, which have been published, show that the undeveloped coated paper can be kept at 35° to 40° F. for at least five months without any deterioration in strength.

Progress was made during the year in the work to determine what physical properties map paper should have to withstand the rough handling to which it is sometimes subjected, to determine the relative value of carbon paper of different weights and kinds, and to determine the effect of temperature and humidity on the physical properties of paper. Work was done also on the preparation of specifications for paper for various uses in the Government service.

TECHNICAL SECTION, PAGE 246

Waste Liquor and Gases of the Paper Industry

Survey of the Recent Domestic and Foreign Patent Literature on the Utilization of Waste Liquors and Waste Gases of the Pulp Industry, 1912-1924

By A. Schrohe[1]

Translated, with additions, by Clarence J. West, Chairman Committee on Abstrcts and Bibliography, T. A. P. P. I.
(Contribution No. 47 of the Committee)

(Continued from last week)

415. 1921. U. S. 1,392,013. Wm. Hoskins. Core compound. Cores are formed of a mixture of concentrated sulphite liquor, 50 parts, raw linseed oil or other oil, 50 parts and ammonium soap, 5 parts.

416. 1921. U. S. 1,394,241. Emil Weber. Liquid ceramic pastes.

Ceramic pastes which are difficultly liquified with alkali are treated with saponin to facilitate liquefaction in order to improve the pouring and molding properties of the material.

417. 1921. U. S. 1,396,028. W. H. Dickerson. Recovering solids from waste pulp liquors.

Hot waste pulp liquors such as sulphite or soda liquors are permitted to undergo self evaporation, additional water is removed by freezing out and the remaining liquor is dried by spraying into hot gases to obtain a material suitable for subsequent fermentation.

418. 1921. U. S. 1,397,039. W. H. Dickerson. Solid constituents of waste sulphite liquors.

Spherical solid particles glazed upon their surface are prepared by spraying the concentrated liquor into a hot gas.

419. 1921. British 156,186. Chemische Fabriken Worms Akt. Ges. Tanning.

A tanning process consists in the use of mixtures of heavy salts of ligninsulphonic acids from waste sulphite liquor, with salts of other organic or inorganic acids, such as sulphuric, formic or lactic acid, and with or without addition of other tanning or non-tanning agents. The mixed salts precipitate glue and do not flocculate in dilute aqueous solutions. Examples are given in C. A. 15, 2747.

420. 1921. British 156,512. M. Mueller and O. Heigis. Cellulose.

The waste liquor from the production of cellulose from ligneous plants and plant fibers by the use of a weakly alkaline or neutral lye under pressure may be acidified with sulphuric acid or sodium bisulphate and a mixture of sulphurous and acetic acids boiled off, the residual liquor being evaporated to dryness and incinerated to produce a raw soda lye which may be converted into a mixture of alkali acetate and sulphite for reuse by adding the mixture of sulphurous and acetic acids boiled off. The waste liquor may be treated with caustic lime and then with sodium bisulphate, a solution of sodium acetate being obtained and calcium sulphite and sulphate being precipitated. Sulphurous and acetic acids may be obtained from the sulphite and acetate and used for the preparation of fresh lye.

421. 1921. British 156,777. C. Harnist. Fibrous cellulose.

In the preparation of cellulose and a valuable residual lye, raw cellulosic materials are subjected to the action of ammonia or other soluble alkali or alkali carbonate and sulphur dioxide in succession or alternately. The material may be subjected to preliminary steaming with or without the addition of alkaline or organic solvents in order to remove tannins, resins, etc., useless in fermentation or in fertilizers and the ammonia and sulphur dioxide introduced in gaseous form under pressure, with or without the addition of water. The residual lye is neutralized or rendered alkaline and subjected to oxidation as by hot furnace gases, or subjected to hot waste gases from sulphur or pyrites furnaces, in towers, with or without the admixture of catalysts such as thionates, polythionates or thiosulphates. Sulphur dioxide, present in combination as sulpholignins, is thus eliminated, ammonia and alcohol are carried off, and the concentrated liquor may be subjected to alcoholic fermentation, or used as a fertilizer, either alone or admixed with potash salts or other fertilizing substances. Waste lye from the calcium bisulphite method may be similarly treated after first treating them with ammonia. Where the material is first treated with ammonia and the liquid is neutralized with sulphur dioxide, substances are precipitated which may be dissolved in turpentine, benzene, etc., and with or without preliminary oxidation by calcium hypochlorite or potassium permanganate may be used for sizing paper. Precipitation of these substances may be assisted by the addition of aluminum sulphate. Where sulphur dioxide is used first, its action is moderated by the addition of saccharifierous substances, such as molasses, vinasse or distillery residue. The process is applicable to substances poor in cellulose, uch as maize straw, rushes, leaves, etc. Cf. ritish 194,289 (1923), C. A. 173,577.

422. 1921. British 171,098. C. R. Reubig. Treating hides.

The deliming or pickling process consists in dipping the hides for a short time in a solution of potassium or other alkali dichromate to which common salt and waste sulphite liquor may be added. The tanning process may be preceded by a filling treatment for 5-10 hrs. with waste sulphite liquor of strength between 3° and 24° Bé, the lower degree of concentration being selected when the tanning is to be followed by impregnation with saponifiable or non-saponifiable substances such as paraffin or ceresin and the higher concentrations in the case of greasing with light fats. Other details in C. A. 18, 766.

423. 1921. British 167,171. Zellstofffabrik Waldhof, C. Hangleiter and H. Clemm. Utilization of waste gases and heat of used sulphite liquors.

In a process for the recovery of sulphurous acid from, and for the utilization of the heat of, the waste gases of pulp boilers, the gases, vapors and lye passing over are introduced directly into raw lye contained in a closed pressure-tight tank such as a pulp boiler, whereby the raw lye becomes enriched in sulphurous acid and heated to 90° or over and ready to be introduced direct to an emptied, but still hot, boiler. The extent of the heating up of the new charge by steam, and the consequent dilution of the lye, is thus reduced.

424. 1921. British 189,190. Badische Anilin und Soda Fabrik. Tanning.

Synthetic tanning agents are produced by condensing waste sulphite liquors or other products of the decomposition of wood containing hydroxy ketones r hydroxy aldehydes with univalent aromatic hydroxy compounds in alkaline medium.

425. 1921. British 189,561. A. R. de Vains. Cellulose.

Lyes that have been previously used to lixiviate cellulosic materials are used as alkaline lyes to dissolve the products obtained by the action of chlorine on lignocellulose or on a semi-paste of cellulose.

426. 1921. British 195,719. W. S. Smith. Fuel.

Ground or pulverized oil shales are mixed with binding materials, such as coal tar, pitch, resin, sulphite cellulose liquids,

[1] Papierfabricant 23, 30-33, 63-65, 89-92, 158-161, 251-253, 284-287, 293-296, 306-307. (1925).

etc., and the mixture compressed into briquettes. Coal dust, etc., may be added to the mixture before compressing and the briquettes may be rendered waterproof by immersion in hot pitch, glue, water glass, etc.

427. 1921. Canadian 214,450. H. A. E. Nillsson. Evaporating waste sulphite lye.

Sulphite lye is heated to 90-100° and the constituents which form incrustations are precipitated with calcium hydroxide or pulverized limestone and removed. The lye is then passed through heating elements, the exterior surfaces of which are exposed to the heating action of compressed vapors from the lye.

428. 1922. U. S. 1,400,164. H. H. Hurt. Waterproofing composition.

A composition adapted for waterproofing and binding road materials is formed from insoluble soap, such as aluminum soap, together with waste sulphite liquor free from lime.

429. 1922. U. S. 1,412,215. D. W. Patterson and H. L. Wooldenden. Ore flotation separation.

The gummy material of "black liquor" from treatment of vegetable material is used as a frothing agent.

430. 1922. U. S. 1,419,497. P. Goldberg, P. Onnertz and A. Peters. Protecting animal fibers of mixed goods from injurious effects of alkaline solutions.

Sulphite cellulose waste liquor is added to aykaline solutions such as dyeing, mercerizing or degumming solutions in order to protect animal fibers.

431. 1922. U. S. 1,424,308. H. H. Hurt. Road pavement.

Old base and top of asphalt pavements are ground to a sand-like fineness and used for road making with a binder of waste sulphite liquor.

432. 1922 U. S. 1,427,911. L. T. Richardson. Plastic composition.

Asbestos (previously treated with an acid to eliminate or neutralize the basic substances therein) is mixed with sulphur and stearin pitch and heated in steam or other non-oxidizing gas to 250° F. or more.

433. 1922. U. S. 1,428,207. A. Biddle. Fire-extinguishing composition.

A viscuous fire-extinguishing foam is prepared by reaction of separate solutions containing "acid sulphite glutrin" and an alkaline substance, together with other ingredients such as glucose, gums, soap, casein, starch or carbon tetrachloride.

434. 1922. U. S. 1,429,522. A. Mittasch and F. Winkler. Manufacture of finely divided sulphur.

Sulphur in a very finely divided state is formed by evaporating an ammonium sulphide or polysulphide containing waste sulphite liquor under ordinary or diminished pressure The sulphur is capable of forming extremely stable suspensions or sols.

435. 1922. U. S. 1,430,477. J. K. Tullis. Tanning composition from quebracho.

A solution of commercial quebracho extract is made with acidulated light liquor from sulphite paper pulp digesters. The liquor is acidulated with an aromatic sulphonic acid, *e. g.*, cresol- or naptholsulphonic acid.

436. 1922. U. S. 1,433,579. Otto Vogel. Pickling metals.

A suitable composition consists of diluted mineral acids (hydrochloric or sulphuric acid) or acid substance (as sodium bisulphate) and 1-10 per cent of the extract obtained by treating anthracene residues, sulphite waste liquors or the residue of the napthalene distillation with 3 to 4 parts by weight of sulphuric acid and separating the obtained solution from the undissolved.

437. 1922. U. S. 1,437,487. A. Biddle. Caoutchouc composition.

A composition of matter comprising caoutchouc latex, sulphur, casein and a filling material, such as wood pulp and wood pulp liquor products, etc.

438. 1922. U. S. 1,437,775. Canadian 220,516. H. Plauson. Montan wax.

After extracting the wax from bituminous brown coal, the residue can be worked up into briquettes by adding sulphite cellulose liquors and compressing.

439. 1922. Canadian 221,816. E. Pollascek. Fuel briquette.

Coal dust is mixed with alkaline sulphite waste lye and heavy mineral oil and pressed in molds without heating.

440. 1922. Canadian 222,839. British 178,104. A. Schmidt. Chlorination of cellulose lyes.

Cellulose lye is treated with chlorine, the resulting precipitate is removed and treated with a chlorate and hydrochloric acid. The product has a reddish yellow color, is soluble, and may be used as a tanning material and as a substitute for resins.

441. 1922. Canadian 225,510. C. Jaeger and M. W. Erickson. Briquette.

A binder of condensed sulphite liquor and a small amount of calcium hydroxide is thoroughly mixed with finely divided fuel; the mixture is formed into briquettes under high pressure and temperature.

442. 1922. Canadian 226,306. C. Ellis. Drying sulphite waste liquor.

A current of gas containing some free oxygen but less than does ordinary air is circulated and finely divided liquid to be dried is sprayed into the gas current in its circuit. The moisture is removed from the circulating gases at another point of its circuit.

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443. 1922. Canadian 226,610. J. Gorbing. Fertilizer.

A fertilizer is produced by reaction on waste lye from cellulose manufacture with quick lime and magnesium oxide.

444. 1922. Norwegian 34,835. Aktieselskapet Sulfitsprit. Organic compounds from sulphite liquor.

For the decomposition of the ligninsulphonic acids and the consequent precipitation of the lignites a certain concentration of sulphuric acid in the liquor is required. This is attained by conducting the liquor together with gas from the roasting furnaces into an autoclave supplied with an apparatus for spark discharging. Sulphur dioxide is oxidized and sulphur trioxide absorbed by the liquor. The gas is then blown into the absorption towers.

445. 1922. Norwegian 34,954. Aktieselkapet Sulfitsprit. Sulphite waste liquor.

The liquor is heated under high pressure in the usual way and neutralized with calcium carbonate. Then lime milk is added until the reaction is alkaline, whereby a precipitate of lignites is obtained.

446. 1922. Norwegian 35,302. A. H. Kier and Co., Ltd. Protein and lignin products.

Products of this kind are obtained by mixing protein compounds with lignin compounds, *e. g.*, a solution of sulphite char or the mother liquor obtained by the production of sulphite char.

447. 1922. Swedish 50,740. H. O. V. Bergström. Distillation of sulphite waste liquor.

A considerable amount of the distillation vapors or mixture of these vapors with air or other gases is overheated and applied to the liquid in the distillation apparatus to which it gives off its excess heat. That part of the distillation vapors that does not take part in the circle process is taken out, eventually under pressure, and the heat utilized for other purposes, while the content of organic acids is recovered by conducting the vapor through milk of lime.

448. 1922. Swedish 51,039. E. L. Rinman. Treating sulphite waste liquor.

The waste liquor is boiled with further quantities of wood. The liquor concentrated in this way is treated with alkalies, preferably lime, until a precipitate of liginin and calcium sulphite is formed.

449. 1922. Swedish 51,399. H. A. E. Nilsson. Recovering sulphur dioxide from celluloseliquor.

The liquor is driven from the boilers into a closed vessel by

means of the pressure in the boilers. Sulphur dioxide and some water are disengaged and drawn off into an acid container by suction induced by keeping the liquor in this container in continuous circulation through an ejector connected with the container. The suction force of the ejector is regulated so as to maintain a pressure in the container approximately corresponding to atmospheric pressure.

450. 1922. Swedish 51,682. P. G. Ekström. Sugar from sulphite waste liquor.

Waste liquor or other liquids low in sugar are enriched with this compound by addition of starch-containing products such as wastes from bakeries, which products are treated at increased temperatures with a dilute acid, *e. g.*, the sulphur dioxide in the waste liquor. The resulting liquid is worked up for sugar or fermented to alcohol.

451. 1922. Swedish 52,734. Aktiebolaget Reymerholms Gamla Spritfoeraedlings. Evaporating liquids containing easily decomposable organic substances.

The liquid flows with great velocity in thin layers that are passed on all sides by the heating medium. The velocity and temperature are regulated so as to counteract the formation of crusts on the heating surfaces. The pressure is kept sufficiently high to avoid any boiling inside the heating aparatus.

452. 1922. British 179,151. Zellstaffabrik Waldhof. Fertilizers.

A fertilizer is obtained by causing a reaction of waste sulphite lye with matter adapted to bind the water of the lye. Quicklime or a mixture of quicklime and magnesia is suitable. Hot concentrated lye is preferably used and peat dust may be added to the mixture. The product is ground for use and fertilizing agents, such as phosphates or potassium salts, may be added either before or during grinding.

453. 1922. British 184,800. J. Gradl. Fertilizers.

A fertilizer consists of finely divided or colloidal carbon or carbonized organic materials in admixture with one or more oxidizers or catalyzers, or with both. The carbon may be obtained by treating sawdust, peat, sulphite lye, etc., with sulphur dioxide, and utilizing the resulting sulphuric acid to break down raw phosphates.

454. 1922. British 197,639. H. Du Boistesselin, O. Dubois, F. W. Tabb, L. Varnier and L. Hertenbein. Agglomerating fuel, etc.

In agglomerating powdered material, particularly fuel dust, by means of pitch, a pseudo-solution of pitch and water is mixed with the material and the mixture pressed and dried. Small amounts of concentrated extracts of sulphite waste liquor, dextrin, etc., may be added to the water. *Cf.* British 222,449 (1923), C. A. 191,045.

455. 1922. British 197,901. Soc. dite L'avebene. Fuel briquettes.

Anthracite, coke, etc., in powder form, is mixed with pulverized mass obtained by concentrating bisulphite lye after complete neutralization of sulphurous acid contained therein. The fuel is compressed into briquettes, which are baked up to about 200° for 20 to 40 min.

456. 1922. British 202,016. C. F. Cross and A. Engelstad. Lignone derivatives; tanning.

Wood and like lignified materials are resolved by treatment at 100-110° with a strong aqueous solution of sulphurous acid which is originally substantially free from sulphuric acid. Preferably the process is carried out in a digester lined with an acid-resisting cement and the materials under treatment are agitated rapidly. The liquor containing the lignone derivatives may be evaporated to dryness, preferably under reduced pressure, or prepared in concentrated form for transport. These derivatives are stated to be different from those contained in sulphite cellulose liquor. The solution of lignone derivatives may be employed in tanning.

457. 1923. U. S. 1,441,240. P. Cmnertz and A. Peters. Dyeing animal or mixed fibers.

In dyeing animal or mixed fibers in an acid bath with "alkali blue 4B," "zambesi black D," or similar dyes which settle out in the presence of acid, sulphite cellulose waste liquor is added to the bath to avoid or diminish settling. Sodium lignosulphonate, "cell pitch," or sugars may also be used.

458. 1923. U. S. 1,442,494. J. E. Plumstead. Recovering values from carbonaceous wastes.

Soda pulp mill waste liquor is heated to effect evaporation and incineration, and the gaseous products from the heating are afterwards brought into contact with the insoluble material which remains from extraction of the residue in order to obtain a fuel for heating the incinerating evaporator.

459. 1923. U. S. 1,445,240. J. S. Robeson. Road pavement.

A road pavement is formed with mineral aggregate including blast furnace slag or other silicates which are attacked by hydrochloric acid and sulphite waste liquor, treated with the latter and magnesium sulphate.

460. 1923. U. S. 1,447,452. L. Wickenden. Decolorizing material containing carbon and colloidal substances.

Porous decoloring carbon carrying colloidal material in its pores is prepared by saturating carbon from wood pulp waste liquors with a 2 per cent aqueous colloidal solution of aluminum hydroxide and drying.

461. 1923. U. S. 1,448,846. W. J. Jordan. Preparing diatomaceous earth and carbon for purifying liquids.

Diatomaceous earth which has been calcined at a temperature above 890° is granulated and impregnated with a carbonizable material, such as blood, tankage, glue, molasses or paper mill waste liquor and the impregnated material is then heated to a charring temperature. The product is adapted for purifying sugar solutions.

462. 1923. U. S. 1,450,685. L. Kirschbraun. Bituminous emulsion.

An emulsion which is non-coalescible on drying and which is adapted for use on roads is prepared from waste sulphite liquor, colloidal clay or other earthy colloidal material and a bitumen in dispersed phase.

463. 1923. U. S. 1,460,012. L. Berend. Colloidal products.

Colloidal preparations are obtained by treating inorganic substances, such as compounds of mercury, copper or chromium, with cellulose waste liquor from either the sulphite or soda process.

464. 1923. U. S. 1,462,752. C. B. Jacobs. Carbon catalyst.

A carbon catalyst adapted for use in making phosgene, carbon tetrachloride or other products is prepared by evaporating and calcining waste liquors of the soda pulp process. The product thus obtained becomes ignited in air at a temperature below 370° (sometimes even at 80-150°).

465. 1923. U. S. 1,464,949. R. J. Loffler. Artificial fibers, films or imitation leather.

A lignosulfo acid, such as precipitated by a protein from sulphite cellulose liquor, is used together with dyes, viscose, fillers and other admixtures in forming fibers, films or artificial leather.

466. 1923. U. S. 1,471,276. O. Nordstrom. Recovering values from bases of soda furnaces

Waste gases from the soda furnaces of sulphate cellulose mills are passed through chips of wood through a filtering shaft so that the hot gases dry the chips; the latter serve to remove the dust and sublimating products. The chips and absorbed products are then passed to a sulphate cellulose boiler.

467. 1923. British 211,886. Ges. für chemische Produktion. Active charcoal.

A cellulosic material, such as wood, cork waste, or straw, is soaked in sulphite cellulose liquor or a similar cellulosic solution and the impregnated material is then carbonized. Salts or other auxiliary ingredients may be added.

468. 1923. British 213,493. W. Moeller. Tanning extracts.

A crude solid extract, such as quebracho extract, is heated with solubilizing reagents, without addition of water, at a temperature

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which will at least cause fusion of the extract. Sodium sulphite, sulphite cellulose extract, sulphonic acids, etc., may be used.

469. 1923. British 215,284. T. Hynson and F. C. Stephens. Printing ink.

A vehicle for printing inks is formed of waste sulphite liquor and rosin or other resin, neutralized or rendered alkaline by addition of lime and preferably also of sodium carbonate or other alkaline compound. The materials are heated together and may be deodorized by blowing with air while hot.

470. 1923. British 216,130. H. Muller-Clem and Ges. fur chemische Production. Deodorizing carbon.

A mixture of carbonaceous material and an alkali sulphide is carbonized, with or without alkali carbonate; thus, sulphite cellulose waste lye may be mixed with potassium sulphide, carbonized, leached with water and the crude lye thus produced used for treating a further quantity of sulphite cellulose.

471. 1923. British 216,949. C. F. Cross and A. Engelstad. Oxidation products of lignone.

Soluble lignone derivs. prepared according to No. 456 are converted into insoluble derivatives by oxidation; the products are colloidal and in dilute solutions may be used for sizing or filling textile materials or for coating wood or as mordants. They are also proposed as starting materials for dyes which result from their treatment with alkalies and sulphides.

472. 1923. British 217,235. E. D. Rinman. Recovering alkali from waste liquors of cellulose manufacture.

Dry distillation of evaporated waste alkali liquor from cellulose manufacture is carried on only until the more valuable organic products such as acetone, alcohol and methyl ethyl ketone are obtained. The distillation may be carried up to 400° and the remaining solid material is preferably cooled, *e. g.*, by spraying water into the retort to reduce its temperature to 250-300°. The cooled material is removed from the retort, crushed or granulated and then heated in a rotary furnace at 750° or else burned as powdered fuel with preheated air at 1000-1200° to causticize all or part of the lime. If the gases produced in the burning of the residue are free from sulphur, they maye be used for preheating to 300° the lime sludge produced during the preparation of sodium hydroxide from the burned residue. The dried preheated calcium carbonate thus obtained may then be burnt with ordinary fuel to obtain lime.

473. 1923. British 217,236, 219,659. W. P. Frey. Briquetting and coking coal.

About 20-35 per cent of bituminous coal or about 10 per cent of tar or pitch is mixed with finely ground anthracite, coke breeze or lignite fines and briquetted with 5-10 per cent of a binder such as a paste of starch, dextrin or gluten mixed with hot sulphite liquor. The briquettes are then heated to about 540-980° to carbonize the binder and the bituminous material.

474. 1923. British 217,468. W. M. Wallace. Recovering soda from waste liquors.

The spent liquor is concentrated and calcined in a rotary furnace and discharged onto a travelling grate, air being supplied so that further burning of the material occurs as it is transported to causticizing pots.

475. 1923. British 217,685. J. d'Ans and Chemische Werke vorm. Auerges Kommanditges. Purifying alkaline liquors.

Alkaline cellulose liquors are heated with sodium chlorate or nitrate in the presence of copper, a mixture of carbon and ferric oxide or other catalyst, to destroy organic substances which are present. Oxygen may be introduced to facilitate the process and the alkali metal carbonate which is formed may be causticized.

476. 1923. British 218,793. J. G. Fairgrieve and Indurit Products Co., Ltd. Synthetic resins.

Condensation of a phenol and aldehyde is effected in the presence of effluent waters of esparto mills, in which bleaching powder has been used, or of other cellulosic materials containing substantial amounts of oxycellulose together with 4-7.5 per cent of lime and 0.50-1.0 per cent of hypochlorite.

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477. 1923. British 194,723, 220,025. M. Melamid. Artificial tanning compositions.

Water sulphite cellulose liquor, the fermentation residues from its use for alcohol production, or isolating ligninsulphonic acid or lignin itself is subjected to esterification with a plurality of esterifying agents, *e. g.*, toluenesulfonyl chloride and acetyl chloride in the presence of sodium hydroxide.

478. 1923. British 222,702. Ges. fur Maschinelle Druckentwässerung Briquetting fuel and ores.

Coal, coke, ore, or other material to be briquetted is mixed with sulphite cellulose waste liquor and with coal sludge or a similar "spreading medium."

479. 1923. British 224,509. C. G. Schwalbe. Waste sulphite cellulose liquor.

The waste liquor is mixed with salts such as magnesium, calcium, and sodium chlorides and heated to 150-200° under 5-8 atmospheres pressure. Acetic acid, methyl alcohol, and sulphur dioxide are recovered and carbon resulting from the process is rendered readily filterable by addition of wood waste, shavings, sawdust or bark to the initial mixture. The solution of salts may be returned to the process and the carbonaceous material may be dried and used for fuel.

480. 1923. British 224,582. Akt.-Ges. Kummler and Matter, Papierfabrik Perlen and E. Wirth. Furnace for utilizing sulphite waste liquor sprayed on the fuel bed.

481. 1923. Canadian 231,625. E. Wirth-Frey. Evaporating sulphite cellulose

Sulphite lyes are maintained alkaline during the entire period of evaporation. Calcium sulphate is removed by the introduction of carbon dioxide.

482. 1923. Canadian 232,272. K. Hangleiter and A. Schneider. Regenerating sulphurous acid and waste heat from sulphite cellulose boilers.

The pressure in the boiler is lowered by withdrawing much of the gas, which is led into a container; then the rest of the gas is withdrawn through another main through which fresh lye is passing to the container. The heat and sulphur dioxide are absorbed by the fresh lye.

483. 1923. Canadian 233,159. H. Clemm and C. Hangleiter. Recovery of sulphurous acid and heat from waste gases of pulp boilers.

The gases and vapors from pulp boilers are introduced without cooling into the raw lye in a closed tank under pressure.

484. 1923. Canadian 235,424. G. A. Richter. Sulphite liquor.

Sulphur dioxide is separated from waste liquor and a basic material is mixed with the liquor to precipiate the combined sulphur as monosulphite, which is then separated from the rest of the liquor and converted into a bisulphite solution by reaction with sulphur dioxide and water

485. 1923. Swedish 53,317. E. S. Sandberg, H. A. E. Nilsson and J. V. Blomquist. Alcohol from sulphite waste liquor.

The liquor, after neutralization, is evaporated to a concentration suitable for fermentation, by which evaporation about half of the methyl alcohol of the liquor is obtained in the condensate and is recovered from this. The residue from the first-mentioned evaporation is neutralized, fermented and evaporated. Ethyl alcohol and some methyl alcohol are obtained in the condensate and are separated in a column apparatus.

(To be concluded)

Great Lakes Paper Corp. Acquires Other Concerns

The Great Lakes Paper Corporation, of Rochester, N. Y., has recently acquired by purchase the businesses and good will of the Great Lakes Paper Company and the Monaghan Paper Company, both of Rochester, N. Y. The Great Lakes Paper Corporation carries a complete line of wrappings, roofings, twines, bags, etc., and is now equipped to largely increase its turnover of these lines of merchandise.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

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THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Profit-Making Possibilities in Seeing Marketing Essentials*

By Col. B. A. Franklin, Vice-Pres. Strathmore Paper Co.

There is in industry no problem more fascinating than that of marketing the products of the industrial unit. It has to be solved over long distances, and deals with human natures not under executive control. It is so apparently full of chance, resting, as it so often does, in the hands of unknown and uncontrollable salesmen. It is so fluctuating, so essential to success, so alluring in its hopefulness, so discouraging at times in its unresponsiveness, so subject to general external conditions. It is a problem of imagination and human nature. It has mostly been considered a problem for special talents, and has often been a matter of spectacular exploitation. It has been least attacked by principles of scientific management.

It is in principle the simple problem of placing the wares of the industrial unit frankly before the public eye, and the intricate problem of really catching the public eye persuasively. And yet in marketing results lies the whole crux of industrial success, both from the point of view of service and of profit.

It is the only industrial problem that is strictly competitive. One industrial unit may have differing methods, a different class of labor, a different layout of factory and machinery, and different policies, but when the results are put on the market, these results must compete with the results of other like producing industrial units, and thus, both in quality and cost, become the gage of the effective value of the industrial unit and, indeed, of the work of the industrial executive and his organization.

Herein, then, lies an important point of view for the industrial executive, that the buying public, in whose service he is by the very nature of industry, and from whom he expects to derive a profit through the marketing of his product, offers him the only effective chance to gage the value of his work and his unit, in comparison with that of competing units.

This point of view should give the industrial executive pause. He will do well to keep this judgment of the buying public constantly in sight and give it a searching examination and a critical interpretation as to the value of his products and his methods, his equipment and his organization. When the judgment is favorable, the marketing problem is not difficult. When the marketing is difficult there can be no doubt, if the state of the business cycle be not in opposition, to all good business, that changes are necessary. And this idea applies equally to each product in a group, even in a successful unit, as it does to the whole group. The necessary change may be in the article, the method of marketing, or in the organization.

This careful attention to the attitude of the buying public is important because it leads to the first essential of good marketing, i. e., sensitiveness to the public's wants and desires. The public has two standards of judgment—quality and price. The market divides itself into three main divisions which must be considered—that section of the public which desires quality somewhat regardless of price; that section which desires certain qualities with not an excessive price; and that section which considers price the most important element.

With a growing population and an increasing standard of living, there is a vast public want in the United States, not to mention other parts of the world, and this public want is growing in its standards, as well as in its quantity demands so rapidly as to keep a sensitive industry constantly and reasonably busy, to say nothing of the demand for new inventions and discoveries; and to these public wants must be added the great needs of industry itself through its very operation. The markets of the world are increasing and must continue to do so for the next quarter of a century. This is an enheartening feature for industry.

This sensitiveness must not, however, be confined to a present market, but must be constantly alert to the realization that the public want is a changing one. Fashions, styles, pleasures, modes of living, are all operating to bring about change in public demand.

A carpet manufacturer finds himself compelled to make rugs or go out of business. A harness company sees its only hope in automobile accessories.

On the other hand, certain dangers have arisen as a result of attempts to express this sensitiveness. Many industrial units have so multiplied the articles of their production as not merely to create an extra cost in their manufacture through the variation, but an added cost because of reduced making orders, smaller shipping orders, larger inventories, loss through misjudgment and obsolescence. The shoe manufacturer finds himself suddenly with 3,000 styles. An axe and tool manufacturer discovers he puts out 2700 articles, actually satisfactorily reducible to 700.

Problems of Standardization

This multiplication creates higher costs or lower profits, and has brought about the effort of the Department of Commerce, in its "Simplification and Standardization" program, to assist manufacturers generally in discovering the reasonably proper shapes, forms, sizes, and styles and quantities which may be manufactured as a maximum and standard group. This movement on the part of the Department of Commerce deserves the heartiest co-operation

* Management and Administration.

of all industrial executives as a matter of self-interest, and they can most easily prove this to themselves by a constant computation of comparative volume of sales of all their separate products. It will usually be found, unless considerable study and care has been previously taken, that many variations may be eliminated with small deductions of volume and disproportionately larger reduction of cost. Simplification and standardization of product form a second important element in marketing, and have a definite relation to production and cost. Oddly enough the first attitude of executives is against simplification and standardization because change seems expensive and difficult. Usually, however, the results are very beneficial.

A third important element in marketing has to do with the locality of markets. The desire for volume of the American manufacturer, based on the idea of reduction of unit cost, expansion of output and plant, and increased profits, together with a laudable idea of pride in wide distribution, has caused many to consider their field of marketing to be no less than the whole of the United States, and in some cases the whole world.

It is a fact, however, particularly in the cheaper staple articles, that many concerns cover their more distant markets at an actual loss, if sales costs are calculated by zones of distribution. In making such calculations, however, the true facts can only be presented if two further considerations are made—the reduction in cost made over the whole production by increase of volume, and the eventual possibilities, in time, of profitable increase in losing localities.

"Marketing Along Lines of Least Resistance"

A logical solution, then, of this phase of marketing is to work the territory in circles, extending in larger radii perhaps, but centering on the industrial unit, and reaching first and most intensively the nearest points, and then the more distant points, where these are, mostly, equally distant from like industrial units. Where the article is a specialty, or has its own peculiar virtues, the most thickly populated centers offer the first best markets naturally.

Of course, the natural market for any industrial unit because of transportation, quick communication and ease of personal touch, lies nearest the unit, and it would seem wise that this should be most intensively operated as it is easier to reach and retain. To work a market intensively, however, requires two important preparatory steps.

There should first be a survey of the market to estimate the possibilities of sale. Following the survey, a plan should be operated for a fair economical coverage and realization of those possibilities. Too often it occurs that the sales effort is merely a superficial "high-spot" effort—a gathering of a little here and a little there. The sales effort ought to be just as carefully and scientifically planned as any production effort. Scientific management—industrial engineering—has a very definite place and mission in sales work, and results will just as readily come from such an effort as in production.

An important fourth consideration in marketing has to do with the course of its progress through the market to the actual consumer, for it goes through very varied channels.

The importance of this fourth consideration is found in the too much discussed and perplexing problems—the reduction of the cost of distribution to a minimum, and at the same time, the gaining of the widest distribution and display to the buying public. There is much complaint of the high cost of distribution. It not infrequently happens that this is greater than the actual cost of production. Many minds have worked on the problem, and solutions such as the chain store are developing are offered, but there seems to be in the problem of wide distribution no great hope that any revolutionary reduction of distribution cost will come about. Certainly it will not so long as the centers of distribution are so numerous and in such small units as they are in America, where so many in their ambition to own independent businesses, start up small stores in increasing numbers.

The Problem of Wide Distribution

What most executives are interested in principally, however, is to get a wide and intensive distribution. This is really the important and consuming problem of the ordinary industrial unit.

Many industries go directly to the consumer. A southern manufacturer of umbrellas sells a large part of his product from door to door. A large shoe manufacturer has his own stores spread over the country. A leather belt manufacturer has a dozen selling warehouses in large centers and agents in the smaller places. A number of similar instances may be cited. If perchance, and probably, these industrial units cannot maintain mercantile branches any cheaper, if as cheap, as the jobber or independent stores which sell a variety of products, at least they usually get the large distribution which reduces the cost of production. Very many industries selling machinery, equipment and supplies, especially to other industries, sell direct. They attain the minimum selling cost.

A great amount of industrial products, however, must be sold through merchants and jobbers necessarily, because either the financial strength of the industrial unit is insufficient to market otherwise, or because the sale of the product is not wide enough to maintain in any section a separate sales unit, and must be combined with other merchandise appealing to a similar public. This group of industrial products represents a very large proportion of the results of industry.

In this phase of distribution lies, then, the main difficulty of the industrial executive—to get adequate representation before the public, since that representation, with varied supplies to sell, is apt to follow the lines of least resistance, and, without exploitation, to let the public choose. In theory this would seem fair enough, except, as the industrial executive sees it, the public needs more information than it ordinarily possesses to make wise choices, and consequently is apt to choose ignorantly.

Advertising As a Selling Force

The industrial executive is then led to a fifth consideration in marketing—advertising. Advertising is merely the practical expression of the executive in the working out of his belief that what his unit produces has a real and wide-spread value to the public eye, and that that knowledge, if he can get it to them, will compel them to buy freely. Whether it is better to advertise in public reading matter, where there is a chance of catching the reader's eye in a broad way, or direct by mail, where chosen individuals are directly addressed, or to employ a judicious mixture of the two, is a matter of serious consideration, but there are certain points about advertising which seem to be generally conceded as true.

In the first place, if a campaign of advertising is entered upon, it is best and most profitable to make the expenditure a fixed per cent of sales to be put in as part of the cost, and the campaign must be a regular and continuous performance. Unless there is some particular idea to be put over at a particular time, only occasional advertising, now in large, now in small sums, is ineffective. No concern ought to enter upon advertising except as a regular thought-out policy of steady operation, if a steady flow of sales is expected to follow, for the public mind, in its demand is both forgetful and volatile. It needs constantly to be reminded and convinced. A once successful concern recently sold for $30,000 because the inheritor of it discovered that it was spending $500,000 a year in advertising, which she thought was wasteful and might be saved. When the advertisements ceased, the demand for the product fell off.

The Place of Price in Marketing

A sixth consideration and a most potent one in marketing, of course, is price. For strictly competitive articles, the general prevailing market fixes the price. It is, of course, recognized by executives that there are usually in any article some offerings lower in price than others, either because quality is shaded or ignorance of cost exists, and this latter very frequently is the case. It is no gain, either to the public or to the industrial unit

and those it involves, that it should enter such a market without complete pre-estimated ability to compete fairly. On the other hand, it is to the interest of the public that competition, acting fairly, by the discovery of more economical production or by changes in the article which shall not deteriorate its serviceability, shall produce the lowest profit-making price.

Modern competition, developing, through its trade customs and ethics, higher bases of fair operation, is producing constantly higher qualities and essentially lower prices in comparison with ability to buy, and this is its economic function.

In a highly competitive market, the higher prices can frequently be obtained by the creation of extra values or advantages in the article offered.

Very often in articles of general and wide-spread use, and even in many articles of irregular use, especially where there is liable to be competition in one locality or between localities, it is valuable to the industrial unit to fix resale prices so that the buyer, no matter where he buys the article, pays the same price. This creates confidence on the part of the buyer, eliminates foolish competition, creates confidence on the part of the merchant in his purchase and sale of the product, permits price advertisement, gives the industrial unit control of the situation, and is perfectly fair to the public, since, while it is essential that a fair profit shall be allowed the merchant, it is greatly to the interest of the industrial unit to make the price as low as possible so as to make it attractive.

Market Surveys

There are many possibilities resting in each of these marketing problems, which a survey, frequently by independent market experts where inside talent seems unavailable, will bring out. Often the requirements and possibilities of the market may be gaged by frank questioning of possible or actual users. The Department of Commerce is ready to advise on standardization and simplification where the facts are not evident from an analysis. A survey will discover the volume value of any market. A study of different channels will show the best, and in different localities this may vary. There are many experts on advertising and on price making. A little money spent in expert advice frequently will make a vast future difference. There are, however, other phases of the whole marketing problem which are important to the industrial situation.

In many trades modern practice has developed trade associations, although in origin these associations are quite ancient, the Writing Paper Association having been formed some 60 years ago. The basis of these associations is that industrial units of like products have very many mutual interests. They all serve the public, and unquestionably they can serve the public by mutual association much better than by separate and unassociated endeavor.

From the industrial unit point of view there are many advantages in association. The law permits the gathering of market data of total demand, demand by grades, etc., and this information is valuable in guiding the individual unit in rendering its share of the service. The individual unit thus gets a very clear view of the total market, its fluctuations up and down with the business cycle, and its fluctuations in price, and can better arrange its own relation to the market. The law specifically prevents the association from acting to control the market or the price, but it does not prevent it from giving the individual unit a clear view of the total situation which he is usually unable to secure for himself.

The Trade Association's Place in Expansion

A great effort of the American manufacturer is for volume sales. The industrial executive estimates, and correctly, too, that if he can keep his plant and machinery running full he will divide his expenses over the maximum product and obtain the minimum expense cost. Having arrived there, possibly he then figures if he increases his capacity he will make a still further reduction in cost and so adds to his plant and equipment. There arrives a point, however, where in many cases this is not true, because after a certain size is passed, the necessary increase in organization may increase the expense to the detriment of cost, and particularly is this so in the retrograde of the business cycle, or, as frequently happens, if the expansion of the trade in general is greater than the growth of public demand. In these cases no unit gets normal capacity orders, prices are cut, and failures occur.

It is here that trade associations are very valuable to keep the individual units in touch with the condition of the trade, the business cycle, and the rate of growth, and the necessity or folly of plant expansion.

The Possibilities of Foreign Trade

A developing need in America, with its growing industrial expansion, its high wages, and its high standards of living is to develop foreign trade. This is a task to which our industrial executives should give more attention and study. The Department of Commerce is making a real effort in this direction and needs support. There is no question but that over the next quarter of a century there lies a great opportunity here for American manufacturers. Asia, Africa, and South America, with large material resources, increasing standards of living still far below America's and small manufacturing ability as yet, are bound to develop fine markets under a combination of financial and industrial effort. But if this is to occur happily, American industry will have to do what it has not very fully attempted to do as yet—to consider the actual needs and desires of these countries in particularity of demand, in marketing, in packing, and in transportation. Undoubtedly in marketing American industry has ahead of it this great possibility.

In a consideration of the marketing question there are internal problems which the industrial executive must work out. A modern method, both from the sales and production points of view, is to budget or fix quotas for the sales at the beginning of the year period. This consists in making a careful detailed estimate of sales by lines, localities, customers or by whatever divisions seem practical. Such a budget, of course, demands some historical record behind it, combined with the best sales judgment, and it needs also a certain amount of readjustment quarterly and monthly.

Another very important matter to be considered in the matter of marketing is the inventory. It is expensive from the point of view both of investment and of fluctuating prices, either of material or finished product, to have a large inventory. On the other hand, if business is to be served promptly it is important to have a sufficient inventory on hand. Much money can be saved by a carefully planned and watched inventory.

Of course, after all is said and done, marketing consists in the main of a definite studied plan, with all the elements considered, and salesmanship, which should be merely an attempt to carry out the plan.

Salesmanship will vary in importance with each unit according to the channels of marketing. There are industrial units with only one or two salesmen. There are others with 200 or 3000. But in all cases the industrial executive will find it valuable to see that certain essentials are found in his salesmen. There are certain qualities, personalities, and abilities, the possession of which make for finer salesmanship. But with any salesman the best results depend on certain attitudes and methods of the industrial executive.

In the first place, salesmen should be trained. They should understand thoroughly the products of the industrial unit, the intricacies of their manufacture, the limitations and scope of their usability. They should know the product through its production. They should know what the unit can and cannot do. One floor-covering concern puts no man on the road unless he has a three or four months' factory training, and calls him back once a year for further schooling and consultation. When on the road the salesman should make a daily report of his expenditure of time, and

(*Continued on page 60*)

Demand For Paper Continues Active in Chicago

Requests for All Varieties of Paper Said to Be Particularly Good for This Season of the Year —Prominent Mills Send Out New Paper Samples—Chicago Paper Association Recently Organized Meets With Edgar Hall of Pilcher-Hamilton Paper Co. Presiding

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., December 12, 1925.—Although the time approaches when the yearly decrease in business is expected, normally about December 20, the paper trade in Chicago is particularly good for this week. Generally the paper merchants are in favorable circumstances, inclined to be optimistic, and at this particular time doing a fine business. The concensus of opinion is that the fall business, though it came tardily, came with such a rush that it will continue into the new year, and some of these merchants predict that because of it business here will be good for the first four months in 1926. Some of the coarse paper men who have studied trend and figures and cost sheets and prices exhaustively, say that the swing of business for the last two weeks has been too great to stop suddenly.

Prices are fluctuating little, coarse papers remaining high after the slight jump last week, fine papers selling at a good rate at a little better than normal for the year.

No slumps are expected except in a fall off of shipments and tonnage, and the opinion seems to be that this will remain for a few weeks, jumping back to normal after January 15.

Fine Papers

Fine papers remain in the same trend as they have for the past three weeks, with the demand estimated about normal and with a tendency to falling off in the cheaper sulphite bonds. Prices remain unchanged. Book papers are selling above average. The expected general slump at this time of the year is coming, but the merchants in fine paper are hopeful that the good business which arrived late this fall will extend into the coming year.

Coarse Papers

The coarse paper market continues good, and even the coming dull season will not be as dull as it normally is, according to the coarse paper merchants. There has been some talk about the mythical boycotting of the southern mills, started no one knows where, and without foundation of any fact as far as could be found. The rumor is perhaps foolish on the face of it, but such rumors do exist. It is thought by some of the members of the new Chicago Paper Association that this was started because of some opposition to the forming of a new organization, and each one interviewed expressed his indignation that such a piece of falsehood should be circulated.

Tonnage of shipment is decreasing some, and orders are diminishing slightly. As this is part of the anticipated decrease, there is not the slightest alarm being shown. The spirit of the paper merchants in point of fact, remains uncommonly high for the week, with hopes still at their highest pitch that business must continue to be good for at least two or three months into the coming year. This, say the dealers, is as far as it can be expected to be seen into the future. There is no indication of any kind of a permanent slump.

Paper Stock

The paper stock market, is not as good as it should be. Prices vary to the extent that they are kept as trade secrets, and not divulged, so that an average is difficult to strike.

Paper Samples

Samples now being sent to the trade are as follows:

Marathon Paper Mills, "The best in the long run," with offices in the Conway Building, is sending samples of its Pin Stripe 100 per cent semi-bleached kraft pulp. The advertisement reads: "Three Vital Points make it popular with paper merchants who have familiarized themselves with it: Strength, that distinguishes it as a wrapping paper of extreme merit. Tear it. Break it. Give it a practical test. Color Variety. Every color requirement and taste can be satisfied. The distinctiveness of our colors plus their variety has a strong appeal. Beauty, the individuality of this paper makes it a "character sheet." It will satisfy the most discriminating users.

The Westfield River Paper Company, of Russell, Mass., sends samples of its Paperglass, embossed in sixteen designs and private brands, "the advertising medium of distinction and beauty displayed through inserts illustrating the utility of this product."

Chicago Paper Association Meets

The Chicago Paper Association, organized recently, met Tuesday night with Edgar A. Hall, Jr., presiding, and discussed its procedure in the elemental things concerning paper trade.

The association has formed the following purposes for itself:

"1. To promote a greater degree of co-operation between the wrapping paper merchants of Chicago by the building up of friendship and confidence through its meetings.

"2. To set up and maintain the highest ethical standards possible for the conduct of the members' business.

"3. To condemn and combat all practices which may exist or arise, which involve the use of sharp practice to produce a profit on sales wherein the unit price made to the purchaser is so low as to be misleading.

"4. To conduct such investigations as may be necessary to educate the members, their salesmen, their sources of supply and their customers, in what is determined to be good business practices, so that sales can be made with economy to the consumer and at a profit to the merchant and the manufacturer.

"5. To give and to ask for complete co-operation with the manufacturers soliciting business from the members."

The initial members of the association are as follows: Daily Brothers Paper Company, Hanchett Paper Company, Hollis & Duncan, Inc., Inlander-Steindler Paper Company, Kircheimer Brothers Paper Company, Levin Brothers Paper Company, Messinger Paper Company, Murnane Paper Company, R. E. Phillips & Brother, Pilchner-Hamilton Paper Company, Pomeroy Paper Products Company, Rauth Brothers, Inc., Fred Rentz Paper Company, Schwarz Paper Company and the F. C. Traver Paper Company.

General News of the Trade

The Warren Manufacturing Company announces the opening of a Chicago office in the Conway Building, 11 West Washington street, after the first of the year. The rooms are numbers 1910-12, which is a fine suite in one of Chicago's best office buildings, where many paper companies have offices. Thomas F. Donoghue will be in charge of the Chicago office.

The Non Spil Paper Cup Corporation, of New York, is sending samples o ftheir folding cups, "with a spout' to the trade. The cup is one of the easiest to drink from, and its points of advantage over others are: it opens automatically, it does not spill, it will not collapse, there is no waste or floor litter, it is refilled quickly, it has a neat appearance, it is refilled quickly, it is economical of space, and it is of low price.

John M. Hart & Co., 1710 Old Colony Building, are now exclusive managers of sales for the United States and Canada of the Boothby Fibre Can Company of Boston, Mass. This was formerly the Eastern Paper Can and Tube Company of Boston, makers of the Nukan patented can which is one of the best cans made witth crimped top and bottom. The company is well known, having been in the paper field for the past twenty years. This announcement appeared in the *Chicago Daily News*, December 5.

You can do all your buying in one building

Every important manufacturer of book and coated stock maintains New York offices in the Fifth Avenue Building. You can make one buying trip in one building and thereby complete your seasonal requirements. You can visit many different firms, see a wide variety of papers, and at the same time do all this with the utmost convenience. Pleasant surroundings and successful associates are apparent wherever you go.

You are ten minutes by subway from the Pennsylvania Terminal, thirteen minutes from Grand Central. All uptown and downtown New York is within equal, or less, riding distance. A subway entrance is in the building. Surface lines and buses pass the door. Two elevated lines are within two blocks.

THE FIFTH AVENUE BUILDING

Broadway and Fifth Avenue at Madison Square, New York

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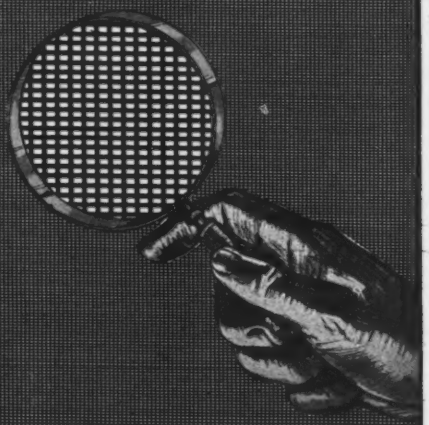

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Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING DECEMBER 12, 1925

SUMMARY

Cigarette paper .....2053 cs.
Wall paper .....30 cs., 37 bls.
Hangings .....7 cs., 93 bls.
Printing paper .....6 bls., 34 cs.
Wrapping paper .....4 rolls, 27 cs.
Tissue paper .....13 cs.
Copy paper .....40 cs.
Filter paper .....7 cs.
Drawing paper .....7 cs.
Baryta coated paper .....74 cs.
Surface coated paper .....273 cs.
Metal coated paper .....5 cs.
Basic paper .....28 cs.
Decalcomania paper .....6 cs.
Straw board .....195 rolls
Envelopes .....65 cs.
Miscellaneous paper .....11 cs., 15 pgs.

CIGARETTE PAPER

American Tobacco Co., Indep. Hall, Bordeaux, 1450 cs.

Liggett & Myers Tobacco Co., Indep. Hall, St. Nazaire, 486 cs.

Standard Products Corp., La Savoie, Havre, 117 cs.

WALL PAPER

F. J. Emmerich, Samaria, Liverpool, 9 cs.

F. J. Emmerich, Samaria, Liverpool, 2 bls.

A. C. Dodman, Jr., Inc., Samaria, Liverpool, 22 bls.

F. J. Emmerich, Minnekahda, London, 21 cs.

F. J. Emmerich, Minnekahda, London, 4 bls.

Baldwin Universal Co., American Banker, London, 11 bls.

PAPER HANGINGS

W. H. S. Lloyd & Co., Minnekahda, London, 36 bls.

W. H. S. Lloyd & Co., Minnekahda, London, 7 cs.

A. C. Dodman, Jr., Inc., Celtic, Liverpool, 57 bls.

PRINTING PAPER

Japan Paper Co., Volendam, Rotterdam, 6 bls.

B. F. Drakenfeld & Co., Samaria, Liverpool, 25 cs.

P. C. Zuhlke, Pittsburgh, Antwerp, 1 cs.

Titan Shipping Co., Homeric, Southampton, 8 cs.

WRAPPING PAPER

E. Dietzgen & Co., Volendam, Rotterdam, 8 cs.

F. C. Strype, Pittsburgh, Antwerp, 4 rolls.

F. C. Strype, Pittsburgh, Antwerp, 11 cs.

A. C. Dodman, Jr., Inc., Homeric, Southampton, 8 cs.

TISSUE PAPER

Meadows, Wye & Co., Samaria, Liverpool, 3 cs.

Steiner Paper Corp., Argen Maru, Kobe, 10 cs.

COPY PAPER

Iwai & Co., Nagato Maru, Kobe, 40 cs.

FILTER PAPER

Taijo Trading Co., Nagato Maru, Nagoya, 5 cs.

H. Reeve Angel & Co., Inc., Minnekahda, London, 2 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Minnekahda, London, 2 cs.

Devoe & Raynolds, Minnekahda, London, 5 cs.

BARYTA COATED PAPER

Globe Shipping Co., Columbus, Bremen, 74 cs.

SURFACE COATED PAPER

P. C. Zuhlke, Pittsburgh, Antwerp, 205 cs.

A. C. Dodman, Jr., Inc., Pittsburgh, Antwerp, 17 cs.

P. Puttman, Pittsburgh, Antwerp, 51 cs.

METAL COATED PAPER

C. B. Richard & Co., Columbus, Bremen, 5 cs.

BASIC PAPER

Globe Shipping Co., Pittsburgh, Antwerp, 28 cs.

DECALCOMANIA PAPER

L. A. Consmiller, Columbus, Bremen, 6 cs.

STRAW BOARD

Schiffenbaum Bros., Volendam, Rotterdam, 53 rolls.

A. Vuyck, Volendam, Rotterdam, 142 rolls.

ENVELOPES

Globe Shipping Co., Columbus, Bremen, 65 cs.

MISCELLANEOUS PAPER

International Forwarding Co., Volendam, Rotterdam, 4 cs.

A. L. Diament & Co., La Savoie, Havre, 7 cs.

P. H. Petry & Co., La Savoie, Havre, 15 pgs.

RAGS, BAGGINGS, ETC.

National City Bank, Thames Maru, Leghorn, 40 bls. rags.

Anglo-South American Trust Co., Thames Maru, Leghorn, 35 bls. rags.

A. Grifoni, Thames Maru, Leghorn, 98 bls. rags.

Anglo-South American Trust Co., Carlier, Antwerp, 54 bls. jute card waste.

National Bank of Commerce, Carlier, Antwerp, 36 bls. flax waste.

J. Cohen Son & Co., Inc., Ascania, London, 21 bls. paper stock.

Amsinck, Sonne & Co., Inc., Archimedes, Manchester, 47 bls. baggings.

L. H. Abenheimer, Archimedes, Manchester, 56 bls. rags.

R. F. Downing & Co., Archimedes, Manchester, 46 bls. new cuttings.

E. J. Keller Co., Inc., Volendam, Rotterdam, 33 bls. rags.

S. Birkenstein & Sons, Volendam, Rotterdam, 70 bls. baggings.

Equitable Trust Co., Ida, Trieste, 34 bls. rags.

Equitable Trust Co., Ida, Venice, 34 bls. rags.

Mechanics & Metals National Bank, Ida, Venice, 453 bls. rags.

Mechanics & Metals National Bank, Ida, Venice, 225 bls. bagging.

G. Carrizzo, Ida, Venice, 165 bls. rags.

A. W. Fenton, Inc., Ida, Bari, 247 bls. rags.

W. Schall & Co., Columbus, Bremen, 47 bls. rags.

Darmstadt, Scott & Courtney, Samaria, Liverpool, 15 bls. rags.

Anglo-South American Trust Co., Sardinian Prince, Buenos Aires, 50 bls. rags.

H. Plascow, Conanova, Santiago, 9 bls. rags.

W. Schall & Co., West Arrow, Antwerp, 73 bls. rags.

A. W. Fenton, Inc., West Arrow, Antwerp, 186 bls. rags.

Castle & Overton, Inc., West Arrow, Antwerp, 39 bls. rags.

B. D. Kaplan, West Arrow, Antwerp, 5 bls. rags.

The Stone Bros. Co., Inc., Indep. Hall, Bordeaux, 79 bls. rags.

Goldman, Sachs & Co., Indep. Hall, St. Nazaire, 187 bls. rags.

E. J. Keller Co., Inc., Estonia, Danzig, 206 bls. bagging.

E. J. Keller Co., Inc., Mexican, Shanghai, 638 bls. rags.

E. J. Keller Co., Inc., Mexican, Kobe, 403 bls. rags.

OLD ROPE

Brown Bros. & Co., Carlier, Antwerp, 53 coils.

Brown Bros. & Co., Idaho, Hull, 403 coils.

Brown Bros. & Co., Pittsburgh, Antwerp, 107 coils.

Darmstadt, Scott & Courtney, Volendam, Rotterdam, 79 coils.

Irving Bank-Columbia Trust Co., Chicago City, Bristol, 81 coils.

MANILA ROPE

Ellermans' Wilson Line, Minnekahda, London, 159 coils.

CASEIN

The Kalbfleisch Corp., American Legion, Buenos Aires, 1750 bags.

Atterbury Bros., Inc., Sardinian Prince, Buenos Aires, 334 bags; 20,040 kilos.

WOOD PULP

A. P. W. Paper Co., Tosto, Sheet Harbor, 10,164 bls. wood pulp, 1059 tons.

Tidewater Papermills Co., Bornholm, Liverpool, N. S., 12,025 bls. wood pulp.

French-American Banking Corp., Volendam, Rotterdam, 850 bls. wood pulp.

Bulkley, Dunton & Co., Ida, Trieste, 1029 bls. wood pulp.

M. Gottesman & Co., Inc., Ida, Sebenico, 4000 bls. wood pulp.

PHILADELPHIA IMPORTS

WEEK ENDING DECEMBER 12, 1925

Equitable Trust Co., London Mariner, London, 135 bls. waste paper.

D. I. Murphy, London Mariner, London, 31 coils old rope.

Brown Bros. & Co., London Mariner, London, 200 coils old rope.

J. A. Steer & Co., London Mariner, London, 47 coils old rope.

A. W. Fenton, Inc., London Mariner, London, 100 bls. rags.

Brown Bros. & Co., London Mariner, London, 32 bls. rags.

National Bank of Commerce, London Mariner, London, 51 bls. rags.

J. B. Moors & Co., London Mariner, London, 401 bls. rags.

A. W. Fenton, Inc., Chicago City, Bristol, 110 bls. rags.

Corn Exchange Bank, Argun Maru, Kobe, 80 bls. rags.

Philadelphia National Bank, Argun Maru, Yokohama, 40 bls. rags.

E. J. Keller Co., Inc., Indep. Hall, St. Nazaire, 296 bls. rags.

E. J. Keller Co., Inc., Hornfels, Bremen, 329 bls. rags.

(Continued on page 58)

The B Co. INC. QUALITY PULPS

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Bleached Sulphite

F. HAGA

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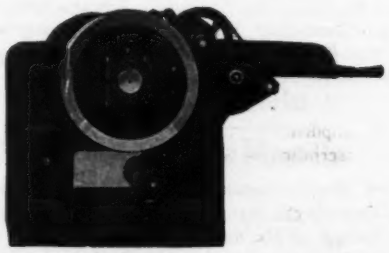

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Micrometer Roll Calipers

LOBDELL CAR WHEEL CO.
Wilmington, Del., U. S. A.

Imports of Paper and Paper Stock

(*Continued from page 56*)

BOSTON IMPORTS

WEEK ENDING DECEMBER 12, 1925

J. B. Moors & Co., Argun Maru, Kobe, 116 bls. rags.

Bulkley, Dunton & Co., Svarten, ———, 3625 bls. wood pulp.

M. Gottesman & Co., Inc., Nordvard, Stockholm, 1500 bls. wood pulp.

M. Gottesman & Co., Inc., Lidvard, Stockholm, 3250 bls. wood pulp.

PORTLAND, ME., IMPORTS

WEEK ENDING DECEMBER 12, 1925

Waterfalls Paper Co., Ida, Trieste, 5149 bls. wood pulp.

BALTIMORE IMPORTS

WEEK ENDING DECEMBER 12, 1925

Bulkley, Dunton & Co., Nordvard, ———, 2875 bls. wood pulp.

M. Gottesman & Co., Inc., Jufuku Maru, Trieste, 1200 bls. wood pulp.

M. Gottesman & Co., Inc., Thyra, Stockholm, 7380 bls. wood pulp.

NEW ORLEANS IMPORTS

WEEK ENDING DECEMBER 12, 1925

G. Mathes & Co., Argun Maru, Kobe, 120 bls. rags.

Castle & Overton, Inc., Ostende, France, 437 bls. rags.

Castle & Overton, Inc., City of Weatherford, Hamburg, 473 bls. rags.

E. J. Keller Co., Inc., City of Weatherford, Hamburg, 43 bls. bagging.

E. J. Keller Co., Inc., Yorck, Bremen, 26 bls. bagging.

NORFOLK IMPORTS

WEEK ENDING DECEMBER 12, 1925

M. Gottesman & Co., Inc., Bird City, Stockholm, 1375 bls. wood pulp.

Castle & Overton, Inc., Manchester Commerce, England, 91 bls. bagging.

SAN FRANCISCO IMPORTS

WEEK ENDING DECEMBER 12, 1925

Frazar & Co., Nagato Maru, Yokohama, 200 bls. rags.

OBITUARY

(*Continued from page 34*)

He left the J. W. Butler Paper Company to go with the New York and Pennsylvania Paper Company, and remained with them for two years before he started in business for himself with H. D. Thomas, in 1909. In 1910 W. A. Tucker joined the firm as secretary, and in 1911 E. J. Schmidt was made vice-president. The company has long been known for its fine high grade papers.

He was born in Cincinnati. He was a member of the Hamilton Club of Chicago, was a consummate Mason, and was a Knight-Templar. He was a member of the Methodist church. His affiliations social, fraternal and business were always of a cordial nature, and he leaves many friends in all fields.

Mr. Parker leaves a widow and a son, Ralph.

His sudden death at such an early age, is a profound sorrow to the paper men of Chicago.

Solomon Bulkley Griffin

[FROM OUR REGULAR CORRESPONDENT]

SPRINGFIELD, Mass., December 14, 1925.—Solomon Bulkley Griffin, 73, President of the Hampshire Paper Company of South Hadley Falls, Vice President of the Carew Manufacturing Company of the same town, Director in the Southworth Paper Company of Mittineague, but nationally known as the managing editor for many years, of *The Springfield Republican* died last Friday morning at his home 185 Mill street after a few hours illness with heart trouble. For many years *The Springfield Republican* has been a school for newspaper workers and for many years he had been the dean of that school and men trained in The Republican office hold hundreds of responsible newspaper positions now all over the country.

Mr. Griffin's interest in paper mills came through his marriage to Miss Ida M. Southworth, daughter of the late John H. Southworth of the Southworth Paper Company in 1892. The Southworths had large interests in the two South Hadley Falls mills and upon the death of Griffin's brother, Mr. Griffin became actively connected with both mills and was accustomed to spend one day each week there. Of late his son Courtland B. Griffin had been interested in these properties. His other son, Bulkley Southworth Griffin, has been for the last few years a Washington nawspaper correspondent, doing syndicate work to some extent.

An odd and interesting fact in connection with his death is that on his desk laid the proofs of a biography of the late Senator W. Murray Crane of Dalton the well known paper manufacturer of whom he was not only a great admirer but a warm personal friend. The book will be issued some time in the spring. Senator Crane was a not infrequent visitor and a warm friendship had existed for years between them.

After his retirement from the *Republican* in 1919 an almost irreparable loss, Mr. Griffin wrote his reminiscences, the book being entitled "People and Politics Observed by a Massacchusetts Editor" this being published in 1923.

Mr. Griffin was born in Williamstown in 1852, son of Rev. Nathaniel Herrick Griffin and Hannah E. (Bulkley) Griffin. He entered the class of 1881 of Williams College but on account of ill health took only a partial course. In 1881 after nine years of serious newspaper work he was given the degree of A.M. and enrolled with his class. He joined The *Republican* in 1872 working under the master hands of Samuel Bowles. He early developed talent and the "nose for news" and when Samuel Bowles died in 1878 he was made managing editor and one of the directors of the Republican Company that succeeded the firm of Samuel Bowles & Co. In 1912 he was presented with a loving cup by his fellow workers on *The Republican* in honor of the completion of 40 years of service on the paper.

He served as trustee of the Springfield Library Association, as President of the Connecticut Valley Historical society and when the $6,000,000 Hampden County Memorial bridge was built wrote the dedication inscriptions for the bronze tablets on the four towers.

Garrett Schneck, Jr.

WEST NEWTON, Mass., December 14, 1925.—Garrett Schenck, Jr., who died here December 6, was born in Bangor, Maine, August 8, 1883. He was the son of Mr. and Mrs. Garrett Schenck, who survive him. He is also survived by his widow, Catharine Staats, one daughter, Catharine Priscilla Schenck, two sisters, Caroline Schenck, wife of Colonel J. S. Cecil, and Marjorie Schenck, wife of Mr. George D. Dutton, and a brother, Hilbert van Nydeck Schenck.

For more than eighteen years he was connected with the Great Northern Paper Company, ten years of which time he was at the head of one of the departments at Millinocket, Maine, and for the last eight years he was assistant to the first vice president. He was president and manager of the Millinocket and East Millinocket Light Company, and of the Knox Lime Company, and a director of the Pope Appliance Corporation.

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The Lindsay Wire Weaving Co.

Collinwood Sta. CLEVELAND, OHIO

New York Market Review

Wednesday, December 16, 1925.
Office of THE PAPER TRADE JOURNAL,

Demand for the various grades of paper continues heavy and the tone of the market is generally strong. While holiday requirements are practically filled, manufacturers are receiving many inquiries for future business and the outlook for the future is decidedly promising. Offerings of all grades are fairly ample and prices are well maintained.

The news print market remains active and the enormous demand experienced recently from the publishers shows no signs of slackening. Most of the leading newspapers of the country are printing a record number of pages, even for this festive time of the year, due to greatly increased advertising patronage.

The condition of the board market is sound and spot supplies, in particular, are in excellent demand. Orders for fine papers are still coming in from the printers in good volume. Coarse papers continue to share in the general improvement, which is expected to continue for some considerable period of time.

Mechanical Pulp

The situation in the ground wood market has slightly improved, although offerings are still rather limited. A fair amount of contract business is said to have been booked during the past week. There has been little spot trading and buyers are having some difficulty in obtaining their requirements at nominal rates.

Chemical Pulp

Chemical wood pulp is unusually firm at present and prices are still rising. Spot offerings, and offerings for shipment from abroad, are very limited. The entire output of Swedish pulp is reported to have been practically sold. Domestic manufacturers are said to be working at full capacity to keep pace with their expanding orders.

Old Rope and Bagging

Old rope continues in fair demand, and the prices on both the domestic and foreign grades used by the paper mills are easier. It is believed, however, that the lower prices are only temporary, as available supplies are below normal, and when consumption increases prices will undoubtedly become firmer. There is a good demand for bagging. Offerings are still limited and prices on all grades remain firm.

Rags

The demand for rags is rather sluggish at present and consumers are apparently holding off until after the holidays. The foreign rag market remains slow, although some mill interest is reported in roofing rags, especially the lower grades. It is said that sellers abroad are inclined to ask more than the mills are inclined to pay at this stage of the market. The domestic rag situation is practically unchanged, and buyers are not expected to show much more interest until the turn of the year, when trading will probably become much livelier.

Waste Paper

The demand for waste paper continues moderate. While there is some request for prompt shipments, the paper mills are not inclined to place more orders until after the stock taking has been concluded. Kraft, which has been the strongest feature of the waste paper trade for some time, is also slightly easier, in tone with the other sections of the market. More buying pressure is anticipated by competent observers after the beginning of the new year.

Twine

The position of the twine market is sounder than for some time. Thanks to the exceptional demand experienced for wrapping paper during the last few months, seasonal sales have been unusually heavy. Dealers are looking forward with considerable optimism to the future of the industry.

Herkimer Fibre Co. Elects Officers

[FROM OUR REGULAR CORRESPONDENT]

HERKIMER, N. Y., December 12, 1925.—Wilbur E. Thompson, was elected president at the annual meeting of the directors of the Herkimer Fibre Company, M. J. Higgins was elected first vice-president with Raymond Harter second vice president. Clayton Cosler was chosen secretary and Charles Hilts was elected treasurer. The insurance committee is made up of Joseph Grande, Anthony Litwin, and Harvey Getman. The company is operating under the benefits and privileges of other plants of the International Paper Company, and a mutual benefit association, similar to those in existence at other I. P. mills, was formed. The entertainment committee is composed of Joseph Parsons, Earl Cosler and Albert Greene; the safety committee is made up of John Walsh, Henry Ste Mary and Charles Hilts. Edward Murphy, Frank Waterbury and Ray Pugh comprise the membership committee. An effort will be made to enroll all employees of the Herkimer plant as members of the new association which will entitle them to all benefits and privileges of the association including life insurance, sick and out-of-work benefits, etc.

PROFIT SHARING POSSIBILITIES

(*Continued from page 53*)

picture the situations he runs into and develops. A large insurance company finds that its men spend only 1 1/10 hours per day in actual sales interviews.

Salesmen should not be allowed to go out except with a definite sales plan and intention and, whenever possible, a definite sales quota. Whenever possible they should operate on an incentive plan.

Marketing a Public Service

Undoubtedly, marketing is both the final as well as the most critical of the functions of the industrial executive. On it depends his eventual success. The world is his oyster, but it is hard to open, and particularly to keep open. That which will most readily keep it open is a clear understanding on the part of the industrial executive that the public owes him and his unit nothing, but if he wants success he must render highly sensitive service which is the basis of industrial service.

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Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, December 16, 1925.

Conditions in the chemical market are generally sound, and a great improvement is evidenced in practically all sections, compared to a year ago. An excellent amount of contract business has already been booked for the forthcoming year and while spot buying, at the time of writing, has quieted somewhat, the volume of inquiries being received by the manufacturers is steadily increasing. Contract withdrawals are still proceeding in a satisfactory manner and a spirit of optimism prevails in all departments.

BLANC FIXE.—The demand for blanc fixe is quite active, especially for the pulp, at works. The powder is also in fairly good request. Prices are well maintained. The pulp is quoted at from $60 to $64 a ton, in bulk, at works, and the powder at from 3¾ to 4 cents a pound in barrels, and from 4 to 4¼ cents a pound, in less than car load lots.

BLEACHING POWDER.—The bleaching powder market is very firm and manufacturers are elated at the amount of contract business being transacted. A persistent demand for this commodity is being experienced and prices continue steady. Bleaching powder is quoted at from $2.00 to $2.40 per 100 pounds, in large drums, at works.

CAUSTIC SODA.—Trading in the caustic soda market continues active and an additional amount of contract business has been closed by the manufacturers. Prices are well maintained at former levels. The current movement against existing contracts is satisfactory and shipments continue to go forward well. The prevailing quotation ranges from $3.10 to $3.15 per 100 pounds, at works. For less than car load lots, the quotation is from $3.76 to $3.91 per 100 pounds.

CASEIN.—A fairly good demand is prevalent in the casein market for both domestic and foreign grades and a satisfactory call for shipments on standing contract is reported. Offerings for spot business were rather light during the week but the market was firmly maintained. Domestic casein is quoted at around 13 cents a pound, and foreign casein at from 13½ to 14¼ cents a pound.

CHINA CLAY.—The improvement reported in the china clay situation continues and both domestic and imported grades are in good request. Manufacturers are also receiving a good volume of inquiries for future business. Domestic wash clay is still selling at $8 a ton, f.o.b., mine; and pulverized at $10 a ton. Foreign grades are quoted at from $14.50 to $22.50 a ton, ship side.

CHLORINE.—The chlorine market is in excellent condition and manufacturers are generally pleased with the situation. There is a general consensus of opinion that the future of the chlorine industry is decidedly promising. The prevailing quotation is 4 cents a pound, in tanks, or multi-unit cars, at works, on contract, while the spot price is around 4½ cents a pound.

ROSIN.—The local market for rosin is somewhat easier. Although a fair inquiry was experienced during the past week, actual business was limited to comparatively small or moderate quantities. Prices have declined slightly, for the time being. The naval stores are now quoting papermakers grades of rosin at from $14 to $14.50, ship side, in barrels of 280 pounds.

SALT CAKE.—The salt cake market is practically unchanged and prices generally are well maintained. Manufacturers report that an excellent volume of contract business has been booked lately. It is believed that deliveries will prove exceptionally large next year. Salt cake continues to be quoted at from $17 to $20 a ton, in bulk, at works.

SODA ASH.—Manufacturers of soda ash report that contract business has been very brisk during the last few weeks. The tone of the market is steady and prices are generally well maintained. The demand for spot business, however, has quieted down, although the schedule of prices is unchanged. Soda ash is now quoted at from $1.35 to $1.65 per 100 pounds, in bulk, at works, and spot car lots at about five cents higher.

STARCH.—A normal and seasonable demand for starch is being experienced by the manufacturers and very little change is reported in the market. Special papermakers starch is still quoted at $3.32 per 100 pounds, in bags and barrels.

SULPHATE OF ALUMINA.—Both contract and spot business in the sulphate of alumina market is rather quiet at present, and manufacturers are confidently awaiting the advent of the new year, when a change for the better is anticipated. Prices continue firm at from $1.40 to $1.50 per 100 pounds for commercial grades, and at from $2 to $2.30 for iron free.

SULPHUR.—An extremely heavy demand for all grades of sulphur has resulted in a general stiffening of prices. Manufacturers are expecting an enormously increased consumption in the forthcoming year. Sulphur is now quoted at from $15 to $16 a ton, in bulk, at mine, and at from $20 to $21 a ton, in bulk, ship side.

TALC.—The tone of the talc market continues strong and the demand is quite satisfactory to the manufacturers, who also report a good volume of inquiries for future business. According to grade, talc is quoted at from $17 to $18 a ton.

PUBLIC PRINTER ASKS FOR BIDS

(*Continued from page 19*)

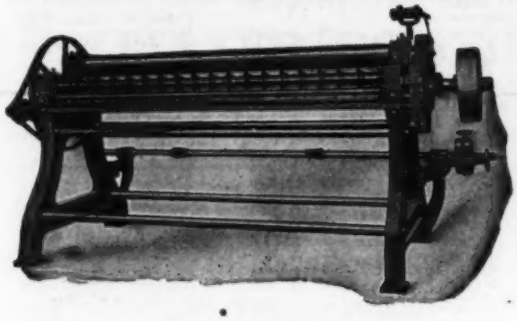
2,540,000 pounds standard news print paper. 5
9,195,000 pounds machine-finish book paper.
90,000 pounds antique book paper.
150,000 pounds light-weight machine-finish book paper.
2,201,000 pounds supercalendered book paper.
150,000 pounds halftone book paper.
290,000 pounds coated book paper.
2,460,000 pounds mimeograph paper.
160,000 pounds lithograph paper.
650,000 pounds U S M O safety writing paper.
16,000 pounds U S M O writing paper.
3,000 pounds safety writing paper.
1,730,000 pounds writing paper.
355,000 pounds map paper.
250,000 pounds chart paper.
875,000 pounds manifold paper.
5,954,000 pounds bond paper.
4,000 pounds parchment deed paper.
918,000 pounds ledger paper.
5,800 pounds tissue paper.
360,000 pounds cover paper.
11,000 sheets cloth-lined cover paper.
1,425,000 pounds wrapping paper.
668,000 pounds manila tag board.
20,000 pounds manila cardboard.
215,000 sheets railroad board.
1,050,000 pounds bristol board.
9,000,000 pounds U. S. Postal Card bristol board.
79,000 pounds index bristol board.
5,000 pounds paraffin paper.
4,500 pounds gummed paper.
215,000 pounds blotting paper.
4,000 pounds stereotype molding paper.
25,000 pounds offset paper.
20,000 pounds oiled manila tympan paper.
2,000 pounds plate-wiping paper.
6,000 pounds back-lining paper, for casemaking.
25,000 sheets pressboard.
500 pounds news board.
452,500 pounds chip or straw board.
100,000 pounds box board.
775,000 pounds binders board.

Senator Appointed to Committee

Senator George Wharton Pepper, of Pennsylvania, has been appointed a member of the Joint Committee on Printing in place of Senator Arthur Capper, of Kansas. Senator Moses, of New Hampshire, will continue as chairman of the committee.

The "Dietz" Toilet Paper Machines

For making Toilet Paper Rolls with or without perforations



Self-Adjusting—Easy to Operate

WE ALSO MANUFACTURE

AUTOMATIC TUBE MACHINES

FOR MAKING TUBES FOR TOILET PAPER ROLLS CAPABLE OF PRODUCING 3,600 WIRE STITCHED TUBES PER HOUR

Also machines for making Sanitary Crepe Paper, Towels, Slitting and Rewinding Machines, Drop Roll Slitters, Photo Mount Beveling Machines, Rotary Card Cutting and Collating Machines, Etc.

CORRESPONDENCE SOLICITED

DIETZ MACHINE WORKS

126-128 Fontaine St., Philadelphia, Pa.

Corner Waterloo St., Below Diamond St., Bet. Front and 2nd Sts.

Clay

300 tons daily

AMERICAN MADE FOR AMERICAN TRADE

Some portion of our clay production is *pulverized*. That part of it which is *pulverized* is, as far as we know, the only *pulverized clay* which is washed and refined before being pulverized. This insures greater freedom from impurities and an exceedingly uniform product.

Prices on M-E pulverized clay may surprise you even considering this additional treatment.

Let us submit samples and quote you

THE

MINER-EDGAR CO

110 William St.,
NEW YORK

POTDEVIN

PAPER WAXING

PAPER BAG

CENTER SEAM ENVELOPE

MACHINERY

POTDEVIN MACHINE CO.

1223 38th Street, Dept. 7, Brooklyn, N. Y.
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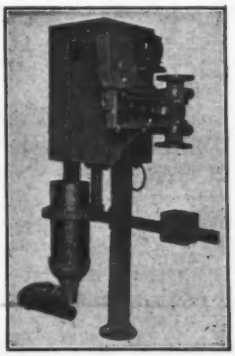
Would you like UNIFORM WEIGHTS?

CERTAINLY!



Do you have them?

SOMETIMES!

Why not use the "TRIMBEY" Regulator and have them—

ALL THE TIME!

More than 400 in use in the paper and pulp mills of North America and Europe.

Full information on request.

TRIMBEY MACHINE WORKS

Glens Falls, N. Y.

"Made in Canada"? Yes.

Market Quotations

Quoted by Stepburn & Co., No. 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Abitibi Power and Paper, Gen. 6s 1940	100	102
Advance Bag and Paper, 7s 1943	98	100*
Brompton Pulp and Paper, 6s 1927	94	96
Beaver Board, 8s 1933	92	94
Bedford Pulp and Paper, 6½s 1942	98	...
Berkshire Hills Paper Co., 8s 1941	...	80
Beaver Products Corp., 7½s 1942	104	106
Belgo-Canadian Paper, 6s 1943	100	102
Brown Paper Co., 8s 1931	102	...
Berlin Mills, 5s 1931	98	...
Bryant Paper Co., 6s 1942	99	102*
Brown Company, Serial, 6s 1925-43	97	100
Central Paper 6½s 1925-42	91	94
Cape Breton Pulp and Paper, 6s 1932	100	...
Carthage Sulphite Pulp and Paper, 8s 1941	40	50
Champion Coated Paper Co., 6s 1924-34	...	102
Champion Fibre Co. Notes, 8s 1930	101	...
Cherry River Paper, 5s 1929	98	100*
Donnaconna Paper Co., Ltd., 6s 1940	95	100
Eddy Paper, 7½s 1931	100	...
Eagle Paper, 6½s 1932	96	100
Escanaba Paper, 6s 1933	87	95*
Fox River Paper, 7s 1931	100	...
Fort Orange Paper Co., 7s 1942	95	99
Gilbert Paper Co., 7s 1927	96	...
Gilbert Paper Co., 6½s 1923-29	101	102*
Hammermill Paper Co., 6s 1930-39	99	...
Hummell, Ross Fibre Corp., 7s 1925	90	...
Jessup & Moore Paper Co., 6s 1945	98½*	100
Lake Superior Pulp and Paper, 6s 1941	105	...
Mattagami Pulp and Paper, 6s 1937	90	...
Marinette & Menominee, 7½s 1936	104	...
National Paper and Type, 6s 1947	96	99*
Oswego Falls Corp., 8s 1942	102	105
Orono Pulp and Paper, 5s 1941	93	96*
Orono Pulp and Paper, 6s 1943	97	100*
Oxford Paper Co., 6s 1947	100	...
Paterson Parchment Paper, 5½s 1927-28	98	100
Paterson Parchment, 6s 1938	98	100*
Parker Young Co., 6½s 1944	92	96
Price Bros. & Co., Ltd., 6s 1943	100	...
Provincial Paper Mills, Ltd., 6s 1940	97	...
Riordon Co., Series A, 8s 1940	115	118
Riordan Paper, 6s 1924	99	101
Riordan Pulp and Paper, Ltd., 6s, 1929	33	35
River Raisin Paper, 8s 1936	104	106
St. Maurice Paper Co., Ltd., 5½s, 1929	98½	99¾
St. Regis Paper, 6½s, 1929-35	97	102
Smith (Howard) Paper Mills, 7s 1941	96	99
Smith (Howard) Paper Mills, 6s 1934	98	...
St. Croix Paper, 5s 1923-37	95	...
Stevens & Thomson Paper, 6s 1942	85	92
Spanish River Pulp and Paper, 6s 1931	105	108
Spanish River Pulp and Paper, Gen 8s 1941	106	109
Ticonderoga Pulp and Paper Co., 6s, 1940	91	95
Ticonderoga Pulp & Paper 1-5, 1930	88	93
S. D. Warren Company, 6s, 1945	97	100
Whittaker Paper, 1st 7s 1942	98	...
Watab Paper Co., 6½s 1942	100	104
Waterway Paper Products, 7s 1924-27	95	100
Wayagamack Pulp and Paper, Ltd., 6s 1951	88	90

STOCKS	BID	ASKED
Abitibi Power and Paper, Com	67	70
Abitibi Power and Paper, Pfd	103	...
Advance Bag and Paper, Com	8	12*
Advance Bag and Paper, Pfd	77	...
Beaver Board, Com	4	6
Beaver Board, Pfd	34	37
Bryant Paper, Cap	12	...
Bryant Paper, Pfd	9	...
Chicago Mill & Lumber Co., Com	63	...
Chicago Mill & Lumber Co., Pfd	98	104
Crown Williamette, Com	93	98*
Crown Williamette, 7% A, Pfd	98	SW
Donnaconna Paper, Com	49	54
Donnaconna Paper, Pfd	95	100
Great Northern Paper, Cap	260	270
Jessup & Moore Paper, Pfd	85	...
International Paper Co., Com	65	70
International Paper Co., Pfd, 6%	85	90
Mengel Company, Com	60	65
Mengel Company, Pfd	83	93
Oxford Papers, Com	102	...
Oxford Paper Co., Pfd	100	...
Provincial Paper Co., Com	94	98
Provincial Paper Co., Pfd	99	...
Price Brothers, Cap	47	50
St. Croix Paper	185	215
St. Maurice Paper Co., Cap	83	85
St. Regis Paper Co., Cap	54	56
Spanish River Pulp and Paper, Com	97	101
Spanish River Pulp and Paper, Pfd	109	...
Ticonderoga Pulp and Paper, Cap	145	...
West Virginia Pulp and Paper, Cap	...	47
West Virginia Pulp and Paper, Pfd	95	105
Whittaker Paper, Com	50	...
Whittaker Paper, Pfd	60	70

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.50	@ 3.90
Rolls, contract, '26	3.25	@ 3.65
Rolls, transit	3.75	@ 4.25
Sheets	4.00	@ 4.25
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	6.25	@ 8.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream		
White No. 1	.80	@ 1.00
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.75	@ .85
Kraft	.90	@ 1.00
Manila	.75	@ .85
Kraft—		
No. 1 Domestic	6.25	@ 6.50
No. 2 Domestic	5.50	@ 6.00
Southern	5.75	@ 6.00
Imported	6.50	@ 7.00
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	5.00	@ 5.50
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.75	@ 3.00
S. Screening	3.00	@ 3.50
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	45.00	@47.50
Straw	57.00	@60.00
Chip	42.00	@45.00
Binders' Boards	72.50	@77.50
Sgl. Mla. Ll. Chip	58.00	@60.00
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported—		
Moist	35.00	@40.00
Dry	38.00	@42.00
(F. o. b. Mill)		
No. 1 Domestic	28.00	@32.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	4.25	@ 4.50
Easy Bleaching	3.55	@ 3.60
No. 1 strong unbleached	3.05	@ 3.25
No. 2 strong unbleached	2.80	@ 2.95
No. 1 Kraft	3.10	@ 3.35
Sulphate—		
Bleached	3.75	@ 4.00
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	4.00	@ 4.50
Easy Bleaching Sulphite	3.00	@ 3.25
News Sulphite	2.90	@ 3.00
Mitscherlich	3.25	@ 3.50
Kraft (Domestic)	3.00	@ 3.25
Soda Bleached	4.00	@ 4.25

Domestic Rags

New Rags

Prices to Mill f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	14.50	@15.00
New White, No. 2	8.00	@10.00
Silesias No. 1	9.75	@10.50
New Unbleached	14.00	@14.70
Washables	8.00	@ 8.25
Fancy	9.25	@ 9.75
Blue Overall	11.50	@11.75
New Blue Prints	7.25	@ 7.75
New Soft Blacks	5.75	@ 6.00
Mixed Khaki Cuttings	6.75	@ 7.25
Pink Corset Cuttings	11.25	@11.75
Pink Muslin	10.00	@10.50
New Light Seconds	3.50	@ 3.75
O. D Khaki Cuttings	7.00	@ 7.50
Men's Corduroy	5.75	@ 6.25
New Mixed Blacks	4.00	@ 4.50

Old Rags

White, No. 1—		
Repacked	6.75	@ 7.25
Miscellaneous	6.25	@ 6.75
White, No. 2—		
Repacked	4.00	@ 4.25
Miscellaneous	3.50	@ 3.75
St. Soiled, White	2.90	@ 3.00
Thirds and Blues—		
Repacked	3.75	@ 4.00
Miscellaneous	3.00	@ 3.25
Black Stockings	3.75	@ 4.25
Roofing Rags—		
Cloth Strippings	2.10	@ 2.20
No. 1	2.10	@ 2.20
No. 2	1.80	@ 1.90
No. 3	1.50	@ 1.60
No. 4	1.60	@ 1.70
No. 5A	1.00	@ 1.15

Foreign Rags

New Light Silesias	10.00	@11.00
Light Flannelettes	10.50	@11.75
Unbleached Cottons	14.00	@14.50
New White Cuttings	14.00	@15.00
New Light Oxfords	10.00	@10.50
New Light Prints	9.00	@ 9.50
New Mixed Cuttings	4.25	@ 4.50
New Dark Cuttings	4.00	@ 4.25
No. 1 White Linens	10.00	@11.00
No. 2 White Linens	7.25	@ 8.25
No. 3 White Linens	6.25	@ 6.75
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.25	@ 4.50
Ord. Light Prints	3.25	@ 3.75
Med. Light Prints	2.50	@ 3.00
Dutch Blue Cottons	3.50	@ 4.00
Ger. Blue Cottons	2.75	@ 3.00
Ger. Blue Linens	4.00	@ 4.25
Checks and Blues	3.25	@ 3.50
Linsay Garments	2.10	@ 2.25
Dark Cottons	1.95	@ 2.05
Shoppery	2.00	@ 2.10
French Blues	3.50	@ 4.00

Bagging

Prices to Mill F. o. b. N. Y.

Gunny No. 1—		
Foreign	3.60	@ 4.00
Domestic	3.75	@ 4.00
Wool Tares, light	2.90	@ 3.10
Wool, Tares, heavy	3.00	@ 3.25
Bright, Bagging	2.85	@ 3.00
Mixed Bagging	2.40	@ 2.50
Sound Bagging	2.10	@ 2.20
Roofing Bagging	1.75	@ 1.80
Small Mixed Rope	2.25	@ 2.50
Manila Rope—		
Foreign	5.25	@ 5.50
Domestic	6.50	@ 6.75
New Bu. Cut	4.00	@ 4.25
Hessian Jute Threads—		
Foreign	4.50	@ 5.00
Domestic	4.25	@ 4.75

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.65	@ 3.85
Hard, White, No. 2	3.15	@ 3.25
Soft, White, No. 1	2.95	@ 3.20
Flat Stock—		
Stitchless	1.30	@ 1.40
Overissue Mag	1.30	@ 1.40
Solid Flat Book	1.15	@ 1.25
Crumpled No. 1	.85	@ .95
Solid Book Ledger	1.75	@ 2.00
Ledger Stock	1.50	@ 1.65
New B. B. Chips	.60	@ .70
Manilas—		
New Env. Cut	2.65	@ 2.80
New Cut No. 1	1.65	@ 2.00
Extra No. 1 old	1.20	@ 1.30
Print	.75	@ .85
Container Board	.60	@ .70
Bogus Wrapper	.75	@ .85
Old Krafts Machine compressed bales	2.40	@ 2.55
News—		
No. 1 White News	1.95	@ 2.05
Strictly Overissue	.75	@ .85
Strictly Folded	.65	@ .70
No. 1 Mixed Paper	.45	@ .50
Common Paper	.30	@ .35

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.42	@ .45
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.34	@ .41

The Mayer Laboratory Coating Machine

for *paper coating, treating, saturating,* and *sizing,* is now ready for the market. Delivery will be made in February on orders placed this month.

MAYER COATING MACHINES CO.
ROCHESTER, NEW YORK, U. S. A.

PAPER MAKERS CHEMICAL CO.
Western Paper Makers Chemical Co.
EASTON HOLYOKE KALAMAZOO
JACKSONVILLE PENSACOLA ST. AUSTELL

CLAYS ROSIN SIZE
SATIN WHITE FOAM KILLER

FELT SOAP and OTHER SPECIALTIES

Your Card in This Space Will Bring Results
Rates on application

ATTERBURY BROS.
(INCORPORATED)
WOOD PULP, RAGS AND PAPER STOCK, FRENCH CASEINE
145 NASSAU STREET (Potter Bldg.) NEW YORK

This— department offers you an opportunity to dispose of your surplus material, equipment and supplies.

Take— advantage of it by placing an advertisement in these columns containing a list of what you have to offer.

PARIS BLACK

No Streaks No Lumps No "Shiners"

BECAUSE of its great tinctorial power, Paris Black does not streak out in any pulp mixture, but spreads easily, quickly and uniformly. Its dense black colors are absolutely light-proof, and the color it imparts to any paper stock positively will not fade.

Paris is far superior to any aniline or sulfur coloring medium, being cheaper as well.

The fine molecular sub-division of the carbon makes lumping of any Paris mixture impossible, hence eliminates any risk of "shiners" in the finished stock.

Paris Black, handled properly, does not clog in beaters, stuff chests or pipes. . Its extreme lightness and "floating" qualities make cleaning easy.

Samples and quotations of Paris Black may be had upon request. No obligation.

If it is not BINNEY & SMITH CO. Black it is not PARIS

Binney & Smith Co
41 E. 42nd Street-New York City

Finished Jute—			
Dark, 18 basis...	.30	@	.31
Light, 18 basis..	.28	@	.30
Jute Wrapping, 3-6 Ply—			
No. 1	.22	@	.24
No. 2	.20½	@	.22½
Tube Rope—			
4-ply and larger..	.16	@	.19
[illegible]			
4-ply and larger..	.20	@	.23
4-ply	.21	@	.24
.....	.22	@	.25

Unfinished Jute—			
Basis	.15½	@	.16½
Paper Makers' Twine			
Balls	.12	@	.13
Box Twine, 2-3 ply	.15	@	.17
Jute Rope	.39	@	.40
Ameri. Hemp, 6...	.30	@	.32
Sisal Hay Rope—			
No. 1 Basis	.16	@	.18
No. 2 Basis.....	.10	@	.12
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.20	@	.21

CHICAGO

Paper

F. o. b. Mill

All Rag Bond.....	35	@	40
No. 1 Rag Bond...	25	@	35
No. 2 Rag Bond...	14	@	25
Water Marked Sulphite	9	@	12
Sulphite Bond.....	7	@	10¼
Sulphite Ledger....	9	@	12
Superfine Writing..	18	@	24
No. 1 Fine Writing	14	@	18
No. 2 Fine Writing	12	@	14
No. 3 Fine Writing	9	@	12
No. 1 M. F. Book.	5½	@	7½
No. 1 S. & S. C. Book	6	@	7¾
Coated Book.....	7½	@	10
Coated Label.....	7½	@	10
News—Roll, mill...	3½	@	4¾
News—Sheets, mill	3¾	@	4¾
No. 1 Manila.....	4¼	@	5¾
No. 1 Fibre.....	4¼	@	5¼
No. 2 Manila.....	4¼	@	4¾
Butchers' Manila...	4	@	4½
No. 1 Kraft.....	6	@	6½
Southern Kraft ...	4¾	@	5
No. 2 Kraft	5¼	@	5¾
Wood Tag Boards.	4¼	@	6¾
Sulphite Screenings	3	@	3¼
Manila Tissue, 24x36 sheet	7¼	@	7¾
White Tissue, 20x30 sheet	7¼	@	7½
Boards, per ton—			
(Delivered Central Territory)			
Plain Chip 45.00		@	47.50
Solid News 48.50		@	50.00
Manila Line Chip. 57.50		@	60.00

Container Lined—			
(Delivered Central Territory)			
85 Test	—	@	75.00
100 Test	—	@	80.00

Old Papers

F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.50	@	3.60
White Envel. Cuttings	3.15	@	3.25
No. 1 Soft Shav.	2.90	@	3.00
No. 1 Mixed....	—	@	—
No. 2 Mixed....	1.15	@	1.20
Ledger and Writings	1.55	@	1.60
Solid Books	1.40	@	1.50
No. 1 Light Books	1.00	@	1.05
Blanks	2.00	@	2.10
Kraft	2.50	@	2.75
New Kraft Cuts.	2.70	@	2.80
Manila Envelope Cuttings	2.40	@	2.50
Ex. No. 1 Manila..	2.00	@	2.10
Print Manila	.90	@	1.00
Folded News (overissue)	.90	@	.95
Old Newspapers—			
No. 1	.80	@	.85
No. 2	.70	@	.75
Mixed Papers—			
No. 1	.70	@	.75
No. 2	.50	@	.60
Roofing Stocks, f. o. b. Chicago, Net Cash—			
No. 1 .....47.00		@	52.00
No. 2.....45.00		@	50.00
No. 3 .....43.00		@	48.00
No. 4.....41.00		@	46.00

BOSTON

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag content	.18	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.07½	@	.10½
Rag Content.....	.17	@	.45
All Rag	.36½	@	.51
Writings	.08	@	.20
Superfines	.22	@	.50
News	.04	@	.04½
Book, Super	.08	@	.10
Book, Coated	.09	@	.14
Coated Litho.....	.09½	@	.15
Label	.09½	@	.15
Jute Manila No. 1.	.11	@	.12
Manila, Sul. No. 1.	.05	@	.05
Manila, Sul. No. 2.	.03¾	@	.04½
No. 1 Kraft.....	.05¾	@	.06½
No. 2 Kraft.....	.05¼	@	.05¾
Common Bogus....	.02½	@	.02¾
Straw Board	—	@	50.00
News Board	—	@	47.50
Chip Board	—	@	45.00
Single Manila Pulp lined board 57.50		@	60.00
Single White, patent coated board 75.00		@	82.50
Wood Pulp Board..80.00		@	85.08
Binder Boards.....75.00		@	85.00
Tarred Felts—			
Regular 61.00		@	63.00
Slaters 66.00		@	68.00
Best Tarred, 1 Ply, roll 1.50		@	1.60
Best Tarred, 2 Ply, roll 1.70		@	1.80
Best Tarred, 3 Ply, roll 2.00		@	2.10

Old Papers

Shavings—			
No. 1 Hard White 3.75		@	4.00
White Blank News 1.75		@	2.00
Manila Env. Cuttings 2.80		@	3.00
No. 2 Hard White 3.25		@	3.50
No. 1 Soft White.. .02¾		@	.03
No. 2 Soft White.. .02½		@	.03
No. 1 Mixed..... 1.60		@	1.75
No. 2 Mixed..... 1.25		@	1.50
Solid Ledger Stock 2.00		@	1.75
No. 1 Books, Heavy 1.25		@	—
No. 1 Books, Light —		@	1.35
No. 1 New Manila. 2.50		@	2.60
No. 1 Old Manila. 1.75		@	2.00
Print Manila 1.05		@	1.20
Old Kraft 2.25		@	2.35
Overissue News ... 1.00		@	1.10
Old Newspapers ... .70		@	.85
No. 1 Mixed Paper .60		@	.47½
Box Board, Chip.. .60		@	.50

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	—	@	3.37½
Domestic	—	@	3.50
Manila Rope	—	@	5.50
Mixed Rope	2.00	@	—
Scrap burlaps ...	—	@	2.37½
Wool Tares, heavy.	2.50	@	2.75
Mixed Strings...	—	@	1.90
New Burlap Cutting	—	@	3.25

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.15½	@	.15
Silesias, No. 1...	.11	@	—
New Unbleached.	.14½	@	.15
Washable	.07¾	@	.08
Fancy	.10½	@	—
Cottons—According to Grades—Blue—			
Blue overalls.....	12½	@	—
New Black, soft...	.07	@	—
Khaki Cuttings.....	.07	@	—
Corduroy	.04	@	.05
New Canvas	.12	@	.12½

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1 .....10.00		@	—
Repacked 9.50		@	—
Miscellaneous 8.50		@	—
White No. 2—			
Repacked 6.50		@	—
Miscellaneous..... 5.25		@	—
Thirds and Blues—			
Repacked 5.00		@	—
Miscellaneous ... 3.50		@	—
Roofing Stock—			
No. 1 ..... 2.15		@	—
No. 2 ..... 1.90		@	—
No. 3 ..... 1.75		@	—
No. 4 ..... 1.90		@	—

PHILADELPHIA

Paper

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2.....	.16	@	.25
Fine, No. 3.....	.12	@	.20
Book, M. F.....	.06¾	@	.07
Book, S. S. & C...	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph.	.09	@	.12
Label	.09	@	.12
News	.03½	@	.04
No. 1 Jute Manila.	.09½	@	—
Manila Sul., No. 1	.04½	@	.06
Manila No. 2.....	.04	@	.04½
No. 2 Kraft.....	.05¼	@	.05¾
No. 1 Kraft.....	.06¼	@	.06½
Common Bogus ...	.02¾	@	—
Straw Board 56.00		@	55.00
News Board 45.00		@	—
Chip Board 47.50		@	—
Wood Pulp Board. 4.50		@	5.00

(Carload Lots)

Binder Boards—			
Per ton 75.00		@	80.00
Carload lots 65.00		@	70.00
Tarred Felts—			
Regular 66.00		&68.00	
Slaters 70.00		@	72.00
Best Tarred, 1-ply (per roll) 1.85		@	1.95
Best Tarred, 2-ply (per roll) 1.55		@	1.70
Best Tarred, 3-ply. 2.10		@	2.15
No. 1 Mixed Paper .65		@	.70

Domestic Rags—New

Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.13½	@	.14
New White, No. 2	.06	@	.08
Silesias, No. 1...	.10½	@	.11
New Unbleached.	.14	@	.14½
Washable	.07¼	@	.07¾
Fancy	.09½	@	.10
Cottons—according to grades—			
Blue Overall	.11	@	.12
New Blue.....	.04	@	.04¼
New Black Soft..	.06	@	.06¾
New Light Seconds	.03½	@	.03¾
Khaki Cuttings..	.06½	@	.07
Corduroy	.04	@	.04½
New Canvas	.08¾	@	.09
New Black Mixed	.05	@	.05½

Bagging

F. o. b. Phila.

Gunny, No. 1—			
Foreign	3.00	@	3.25
Domestic	3.00	@	3.25
Manila Rope	4.75	@	6.00
Sisal Rope	2.50	@	—
Mixed Rope	1.00	@	1.25
Scrap Burlaps...	2.25	@	2.50
Wool Tares, heavy.	2.00	@	2.13
Mixed Strings...	1.25	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.25	@	3.50

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.50	@	3.60
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	2.60	@	2.70
No. 2 Soft White	2.00	@	2.20
No. 1 Mixed....	1.50	@	1.60
No. 2 Mixed....	1.00	@	1.10
Solid Ledger Stock.	1.75	@	1.90
Writing Paper	1.60	@	1.65
No. 1 Books, heavy	1.30	@	1.40
No. 2 Books, light.	1.20	@	1.25
No. 1 New Manila.	1.80	@	2.00
No. 1 Old Manila..	1.60	@	1.75
Print Manila.....	1.25	@	1.35
Container Manila..	1.00	@	1.10
Old Kraft	2.00	@	2.10
Common Paper....	.50	@	.60
Straw Board, Chip.	.60	@	.65
Binders Bd., Chip..	.60	@	.65
Over issue News...	.85	@	1.00
Old Newspaper....	.70	@	.75

Old White, No. 1—

Repacked	6.75	@	7.00
Miscellaneous ...	6.25	@	6.50
White, No. 2—			
Repacked	.05	@	.05¼
Miscellaneous ...	.04¾	@	.05
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous ...	2.75	@	3.00
Black Stockings.	4.25	@	4.50
Roofing Stock—			
No. 1	2.00	@	2.15
No. 2	1.90	@	2.00
No. 3	1.25	@	1.35
No. 4	1.10	@	1.20
No. 5A	1.10	@	1.15
B	1.05	@	1.10
C	1.00	@	1.05

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.10½	@	.12½
Light tinted	.11	@	.13½
Dark tinted	.12½	@	.15
Ledgers (sulphite).	—	@	.13
Ledgers No. 1.....	.16	@	—
Ledgers No. 2.....	.27	@	—
Writing	.09½	@	
Writing S. C.	.10	@	
News f. o. b. Mills—			
Rolls (carloads)..	3.50	@	—
Sheets (carloads).	—	@	4.25
Sheets (2 tons or over)	—	@	4.60
Book—			
No. 1 M. F. (carloads)	8.00	@	—
No. 2 M. F. (carloads)	7.50	@	—
No. 3 M. F. (carloads)	7.00	@	—
No. 1 S. C. (carloads)	8.50	@	—
No. 2 S. C. (carloads)	8.00	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila ...	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F......	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood 30.00		@	32.50
Sulphite easy bleaching 60.00		@	65.00
Sulphite news grade	55.00	@	58.00
Sulphite, bleached	75.00	@	80.00
Sulphate 72.50		@	73.00

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. cut..	3.65	@	—
Soft White Book shavings	—	@	3.15
White Blk. News	1.70	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers ...	1.40	@	—
Manilas—			
New Manila Cut.	—	@	1.60
Printed Manilas..	1.10	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.90	@	—
Folded News ...	.90	@	—
No. 1 Mixed Papers	.70	@	—
Domestic Rags—			
Price to mills, f. o. b. Toronto			Per lb.
No. 1 White shirt cuttings	.14½	@	.14¾
No. 2 White shirt cuttings	.08	@	.08½
Fancy shirt cuttings	.09¾	@	.10
No. 1 Old Whites..	—	@	—
Third and blues...	—		—